RAILROAD MAGAZINE

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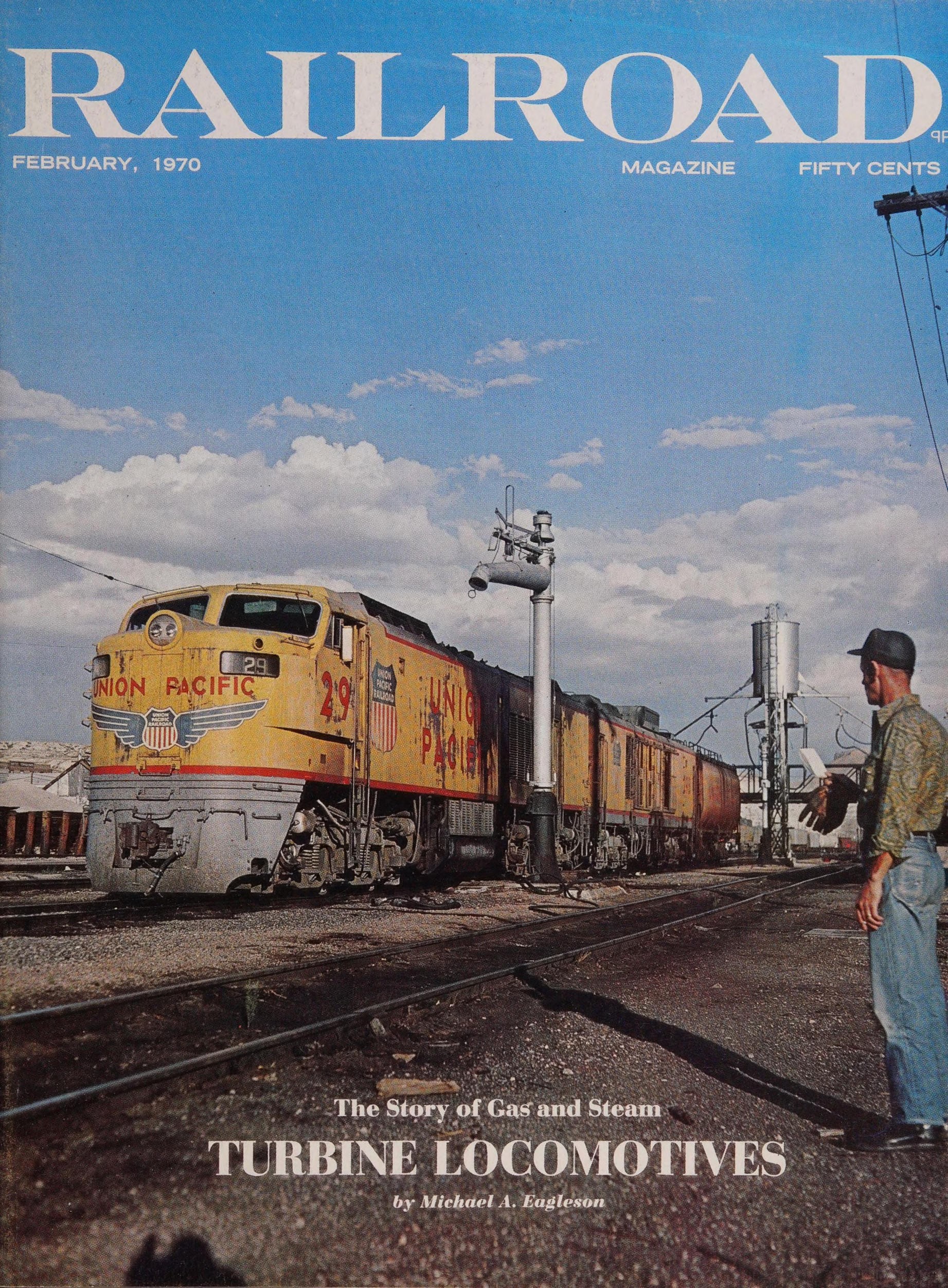

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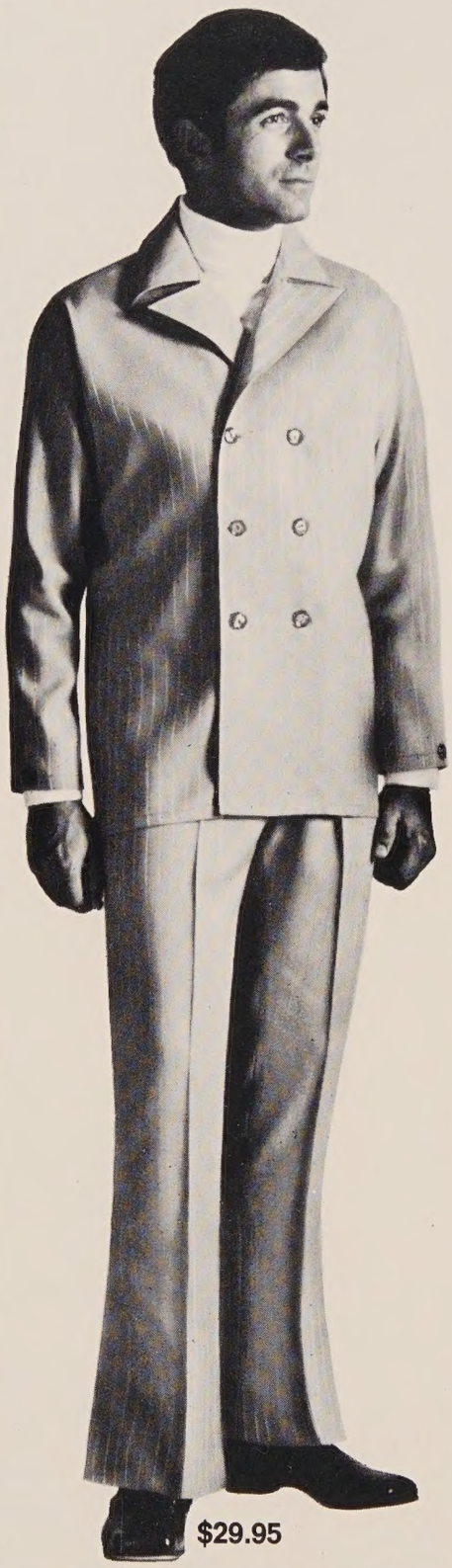

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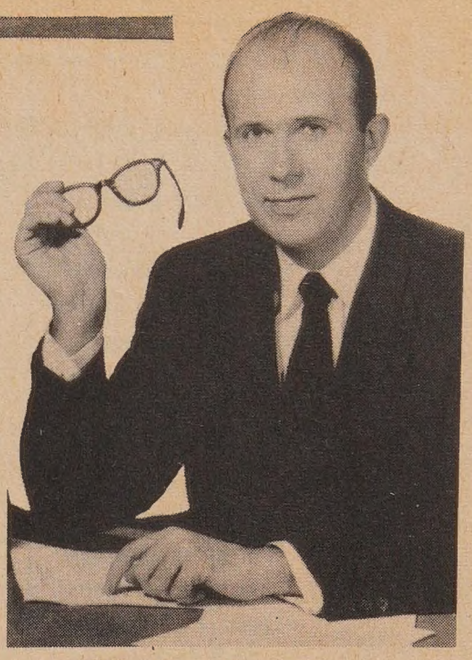
How to Speak and Write Like a College Graduate

"It's easy," says Don Bolander...

"and you don't have to go back to school!"



"Do you avoid the use of certain words even though you know perfectly well what they mean? Have you ever been embarrassed in front of friends or the people you work with, because you pronounced a word incorrectly? Are you sometimes unsure of yourself in a conversation with new acquaintances? Do you have difficulty writing a good letter or putting your true thoughts down on paper?

"If so, then you're a victim of *crippled English,*" says Don Bolander, Director of Career Institute. "Crippled English is a handicap suffered by countless numbers of intelligent, adult men and women. Quite often they are held back in their jobs and their social lives because of their English. And yet, for one reason or another, it is impossible for these people to go back to school."

Is there any way, without going back to school, to overcome this handicap? Don Bolander says, "Yes!" With degrees from the University of Chicago and Northwestern University, Bolander is an authority on adult education. For almost twenty years he has helped thousands of men and women stop making mistakes in English, increase their vocabularies, improve their writing, and become interesting conversationalists *right in their own homes.*

BOLANDER TELLS HOW IT CAN BE DONE

During a recent interview, Bolander said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how it can be done.

Question *What is so important about my ability to speak and write?*

Answer People judge you by the way you speak and write. Poor English weakens your self-confidence – handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead in business and social life. You can't express your ideas fully or reveal your true personality without a sure command of good English.

Question *What does a "command of good English" mean?*

Answer A command of good English means you can express yourself clearly and easily without fear of embarrassment or making mistakes. It means you can write well, carry on a good conversation—also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

Question *But wouldn't I have to go back to school to gain a command of good English?*

Answer No, not any more. You can gain the ability to speak and write like a college graduate right in your own home – in only a few minutes each day.

Question *Is this something new?*

Answer Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

Question *Does it really work?*

Answer Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in their business and personal lives.

Question *Who are some of these people?*

Answer Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers and public speakers, housewives, sales people, accountants, foremen, writers, foreign-born citizens, government and military personnel, retired people, and many others.

Question *How long will it take me to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

Answer In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

Question *How can I find out more about the Career Institute Method?*

Answer I will gladly mail you a free 32-page booklet.

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To receive a free copy of the 32-page booklet, How to Gain a Command of Good English, *just mail the coupon below. The booklet explains how the Career Institute Method works and how you can gain the ability to speak and write like a college graduate quickly and enjoyably at home. Send coupon, card or letter today to Career Institute, Dept. 485, 555 E. Lange St., Mundelein, Illinois 60060.*

DON BOLANDER, Career Institute, Dept. 485, 555 E. Lange St., Mundelein, Illinois 60060.

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RAILROAD MAGAZINE

Adventurous Railroading and Rail Hobbies—Founded 1906

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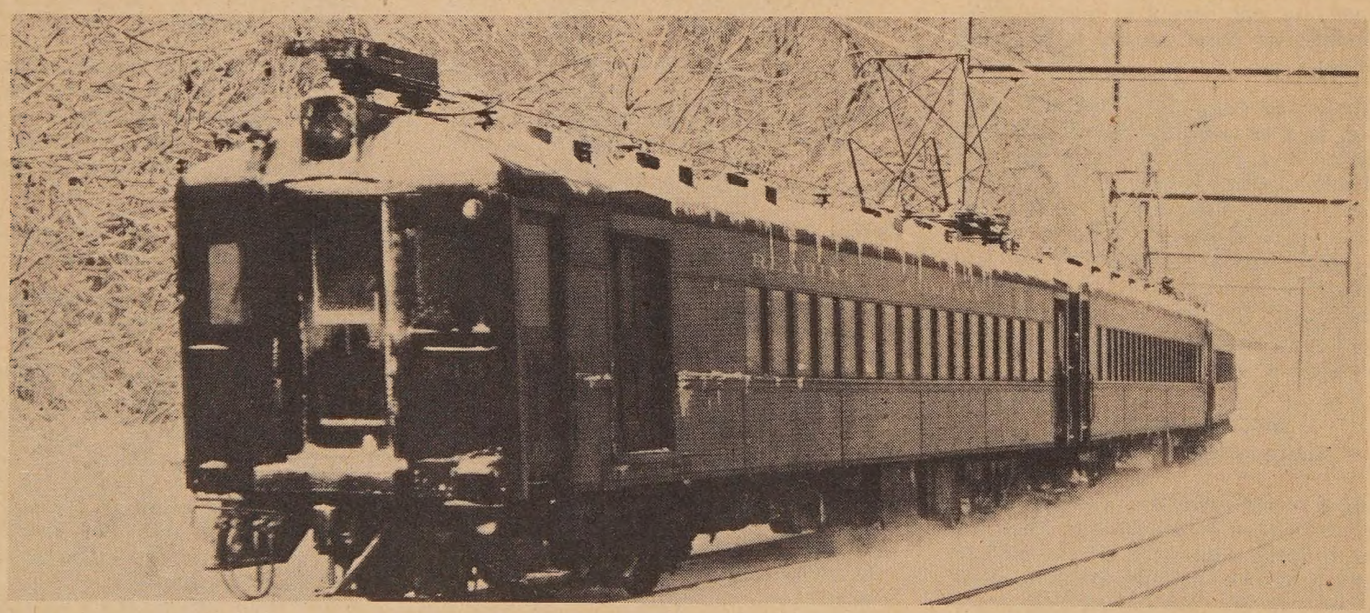
Reading "combine" No. 363 is on way to Chestnut Hill, Pa., through a scenic wonderland, as pictured March 7, 1963, by Robert A. Trennert, 944 East Johnson, Philadelphia, Pa.



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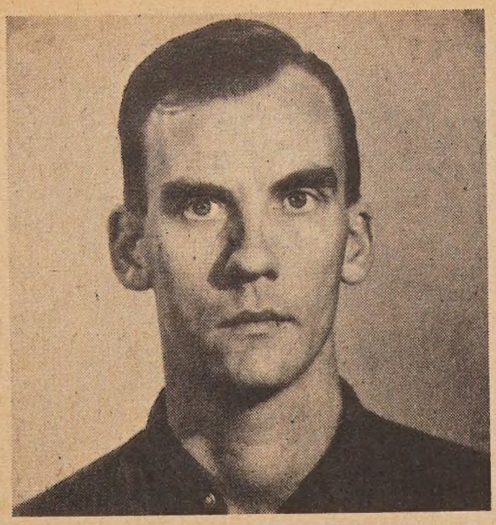

Gary G. Allen, railroader and photographer, fired three years on the SP's Los Angeles and Yuma divisions and worked as an extra brakeman on movie train of little Sierra Railroad in California.

OUR cover shot of a Union Pacific freight train powered by a gas-turbine locomotive being refueled, tieing in with Mike Eagleson's feature article in this issue, was made by Gary G. Allen, 215½ E. Palmer Ave., Glendale, Calif. 91205. The water standpipes built originally for steam locomotives were still functioning, because turbines also needed water. However, it is likely that the last and only major user of turbine locos, the UP, will have removed all such engines from service before you read these words. ●

HERE'S a laugh. Drive-away truckers and owner-operators have been picketing the GMC Truck & Coach plant at Pontiac, Mich., protesting against a General Motors Corp. decision to ship the bulk of its new trucks by rail. Some 75 persons, including wives and children, formed the picket line. So far, this demonstration has not affected plant operation. Truckers claim that the diversion has cost some of them their jobs and has jeopardized their investments in equipment. The Committee to Save Homes, Trucks, and Jobs says: "GM has embarked on a policy of diverting the products of this plant to the tax-supported and subsidized railroads, and we get the scraps."

We'd like to ask two questions: (1) To what extent is rail freight supported and subsidized by taxes? and (2) Why did a GMC plant decide to ship most of its output by rail? ●

NEWS ITEMS. The Maine Central is seeking ICC permission to abandon the nation's easternmost rail line, its Eastport branch, which runs from Ayers Jct. to Eastport, 16.6 miles. The late Franklin D. Roosevelt often rode that that line to get a boat to his Campobello island summer home. When the movie, *Sunrise at Campobello*, was being filmed, Maine Central steam engine 567 (now preserved at Steamtown) pulled a train into Eastport for a re-enactment of one of Roosevelt's arrivals, reports Lyman Holmes, 41 Court St., Machias, Maine.

Snow blockades no longer bother the Soo Line's Western Division as they did a year ago, when the mainline near Wendell, Minn., was out of business with snow blown 20 feet deep in some cuts. Last summer and fall grading crews sloped back the sides of cuts in that area. These changes in terrain caused the very winds that had previously filled the cuts to keep the track blown clear enough so that the normal passage of trains finishes the snow-removal job.

The Long Island, a commuter road with some freight service, is asking the ICC to cancel a recent nation-wide freight-rate increase of 6 percent as applied to LIRR. The line claims the enforced raise is "unlawful" and drives away business. It says: "Commuters, in effect, subsidize an annual freight loss of nearly $7 million."

Since last November 1st, the Union Passenger Terminal in New Orleans, La., hitherto the exclusive domain of railroads, has had Greyhound Bus Lines as a major tenant. Greyhound is leasing Terminal space for 25 years at a rental of $115,000 a year. Alterations costing more than $600,000 were made to permit the daily arrival and departure of 180 buses. Six railroad tracks were closed for that purpose. Rail passenger trains using the terminal dropped from 44 a day in 1954 to 14 now. Does any reader know of another rail terminal used by buses as well as trains?

Illinois Central's "Fastback" piggyback service has been extended to Jackson, Miss., and New Orleans. The new Memphis-New Orleans trains (Nos. 55-56) connect at Memphis with Chicago-Memphis "Fastbacks" 50 and 51 and provide 27-hour service both ways between Chicago and New Orleans. They offer second-morning delivery at Chicago and first night availability of trailers at New Orleans.

New York's Governor Rockefeller has something in mind to do about the troubled New Haven Division of the Penn Central, but he hasn't said yet what his plans are. He said at a recent dinner of the Regional Plan Association that the New Haven "is next on my list."

Bob Coates, a Nova Scotia member of Canada's Parliament, says a decision by the country's railways to waive responsibility for frost damage could seriously hurt the nation's florist industry.

Eastern clergymen of all sects and denominations are still entitled to reduced rail fare. On January 1st the Clergy Bureau of Eastern Railroads absorbed the New England Clergy Bureau. Reductions in rail passenger fares have been available for years to ordained and licensed ministers, missionaries, theological students, and other categories of religious workers who get a certification coupon book from the railroad bureau. Applications should be sent to Eastern Clergy Bureau, 2 Pennsylvania Plaza, Suite 500, New York, N.Y. 10001. A 50-coupon book costs $14.

Paced to Live, a grade-crossing film produced by Great Northern Railway, has won the coveted Golden Eagle award from the Council of International Non-theatrical Events in Washington, D.C.

Last-ditch efforts to save Bush Terminal in the Bay Ridge area of New York City are being made by the 100 industries which use Bush Terminal Railroad. These companies have formed the Bush Terminal Users Assn. Last Oct. 23rd the railroad applied to the ICC for permission to abandon its 50-year-old terminal and trackage.

The Penn Central Co. has been ordered by the Civil Aeronautics Board to divest itself of control of Executive Jet Aviation, Inc., *The Wall Street Journal* reports. CAB charged that Penn Central violated the Federal Aviation Act by acquiring control of the Columbus-based concern that conducts flying services for business men and that PC has been illegally operating in the air transport field through a complex of dealings with domestic and foreign carriers without the board's approval. A Penn Central subsidiary, American Contract Co., owns a 57 percent stock interest in Executive Jet through a voting trust. CAB consistently denies railroads the right to own airlines.

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Bill Ruhnke, 27, was a warehouseman when he started Universal's program for success. Soon he was an Accident Investigator at **"an immediate 40% increase in salary." Now he's a supervisor in St. Louis.**

John Dubreuil, 20, Landover, Maryland, reports, **"A 25% increase, plus $125 a month car allowance."**

Ray Furr, 27, writes about his Accident Investigation job in San Antonio: **"My salary is $100 a month more than my last job and this is only the start. I should double my old salary in one year. This is the result of Universal's course and recommendation—a wonderful job."**

Dick Baden, 26, former truck driver from Napoleon, Ohio: **"Fine salary, expense account, a car, many other benefits. I highly recommend Universal."**

These are just a few of hundreds of men who have stepped into professional careers with the help of Universal. Obviously, men with some college or related experience have an advantage, **but the fact remains that 8 out of 10 men trained and placed by Universal had neither.**

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The Union Pacific train from Los Angeles to Pasadena, Calif., recently made its last run with a locomotive and caboose full of railroad officials and other dignitaries. Then a sign was erected in Pasadena to mark the end of the route, and a rail was pulled up.

The 8.7 miles of track was abandoned for two reasons: (1) Long Beach and Foothill Freeway construction will cut through the railroad right-of-way and (2) there was an increasingly small number of freight customers served by the railroad. So says Tom Marvel of Los Angeles.

Our November issue said that a runaway Union Pacific loco had recently "destroyed" 6 diesels near Las Vegas, Nevada. Says John Rieskl, 2330 S. 15th St., Omaha, Neb. 68108: "The six units are: 3118 (SD-45), 828 (GP-30), and 727B (GR-308), all repaired, back in service; also 429 (SD-24) and 420B (SD-24B), both being repaired, back in service soon; and 183 (GP-9), scrapped, sent to EMD in trade for DDA-40X units; cab was removed for possible service later.

"Most damage was due to fire. Units required rewiring underneath and rewiring of electric locker and trainline. Units 428 and 420B needed considerable frame work while 3618 required rewiring underneath. All units had to get traction motors replaced. The work was done at UP shops. ●

BREAD TICKET, pictured in Dec. issue, is explained by R.E. May, 1414 Kossuth Ave., Everett, Wash. 98201: "Long ago in Canby, Ore., where I grew up, a lady got a basket of bread daily by the afternoon train from a Portland bakery. Each morning she took the empty basket to the depot and put it on a baggage wagon without telling the agent. It went back to Portland by rail, with a ticket attached."

An anonymous reader, aged 73, writes: "When I was a pre-teen kid living in Hiattville, Kan., the southbound Katy train from Ft. Scott, 13 miles north, would put off a basket of bread from a Ft. Scott bakery six times a week. The basket held about four dozen loaves. Later that day the northbound train would take the empty basket back to Ft. Scott. The bread was not wrapped, nor was the basket lined or covered, and was stacked on the store shelf that same way." ●

HUMAN guards with large stop signs at railroad crossings are being replaced all over the country by flashing lights and clanging bells. Relatively few of them are left. One of the few is Allen Pennell, 65, who guards the Hayes Avenue crossing at Endicott, N.Y., and is the only Erie Lackawanna crossing watchman between New York City and Buffalo, N.Y.

Mr. Pennell spends 11 hours a day working out of a small shanty heated by an oil stove. Some 13 to 24 trains roll daily across his intersection in an industrial area. He watches both ways with the help of a small window and a rear-view mirror installed by the door.

Often Mr. Pennell has only 30 seconds to grab his large round sign, which he calls a lollipop, and halt the flow of traffic. The last fatality there was in 1965 when a woman motorist failed to beat a train across the tracks. It happened while the watchman was off duty, reports Joe Dion, 635 Bauder Park Dr., Alden, N.Y. 14004, who adds: "Of course, *Railroad Magazine* is the mainstay of our hobby." ●

OVERSEAS. The Amor-Express, with a motto of "God Speed to All Newlyweds," is now operating in the lovely valley of Toggenburg to make northeast Switzerland the region of lovers. A quaint old steam locomotive pulls two out-of-date but shining passenger cars for honeymooners. So far as we know, Japan is the only other country offering special trains for newlyweds. (See article on page 37.)

India is building 54,000 freight cars for the Soviet Union, the biggest single order of its kind we have ever heard of, involving the equivalent of $800 million in American money.

The railway station at Stratford in East London, England, displays a sign reading—in Chinese—"Please State Your Destination." A British Rail official explained: "There's rather a large Chinese population in that area and many don't speak English. Sometimes ticket clerks asked them where they were going and couldn't be understood. On one occasion, tempers flared and a clerk got punched in the eye."

Sixty persons were injured recently near Cagliari, capital of Sardinia, by the derailment of a passenger train due to running over truck tires apparently placed on the track as a prank by teen-agers.

Nearly 250 million passengers have ridden the bullet-shaped, electric, express trains of the ultra-modern New Tokaido Line since they began speeding between Tokyo and Osaka in 1964 across a countryside dotted with rice paddies, tea farms, and lakes. The 320-mile trip is made in 3 hours and 20 minutes at 125 mph.

The Japanese National Railways, which operate this line, plan to extend it to the southernmost island of Kyushu and eventually to the northern island of Hokkaido. Both islands will be connected by undersea tunnels to Honshu, Japan's largest island and home of the super trains.

The lead and rear coaches of these trains house the engineer's compartment. They are shaped like airplane fuselages to reduce air resistance. Controls at both ends eliminate the necessity of a turnaround at terminal points. After reaching Osaka, the engineer walks to the rear car, the movable seats are switched to face the opposite direction, and the train is ready for the return trip.

Each car has its own motor. Thus the driving power is distributed equally over the entire train and the load is shared equally by all axles. The rails are mounted on rubber cushions, which in turn are placed on prestressed concrete ties interlaced with piano wires. This gives the tracks buoyancy. The cars ride on pneumatic springs to reduce sway.

Passengers on all inter-city trains in West Germany will be able to receive and make telephone calls by 1972. At the moment, only the FD express trains—all first class and extra fare—offer telephone service. They also carry public stenographers to enable businessmen to handle their correspondence while aboard the train.

The French National has introduced a new type of tourist sleeping car, the "T2." This two-level car has 18 compartments, nine lower and nine upper. Each compartment can accommodate two persons and the lower accommodations can be transformed into a compartment for one passenger. The new cars are used on half a dozen routes out of Paris, particularly on the *Train Bleu* and the *Paris-Cote-d'Azur.* ●

TRACKSIDE GRAVE. At Limedale, Ind., about two miles south of Greencastle, on the Monon Railroad, between the mainline and where the track goes back to the Lone Star Cement Plant, there stands a weather-beaten toolshed. In front of this is a small headstone that simply says "Spotty, January 16, 1939," we learn from L. H. Lemley of the Newcastle *Daily Banner.*

Spotty, a little mongrel dog, gave his heart to the Monon freight-train crews that switched the cement plant. Each day, at the same spot, he would wait for his friends. His days were spent roaming the hills and valleys while listening for the familiar whistle of the old steam engine.

You didn't have to tell Spotty which was the whistle of the through train and which was the whistle of the train that was going to stop at Limedale. Somehow he always knew. He waited for the train crew with his head

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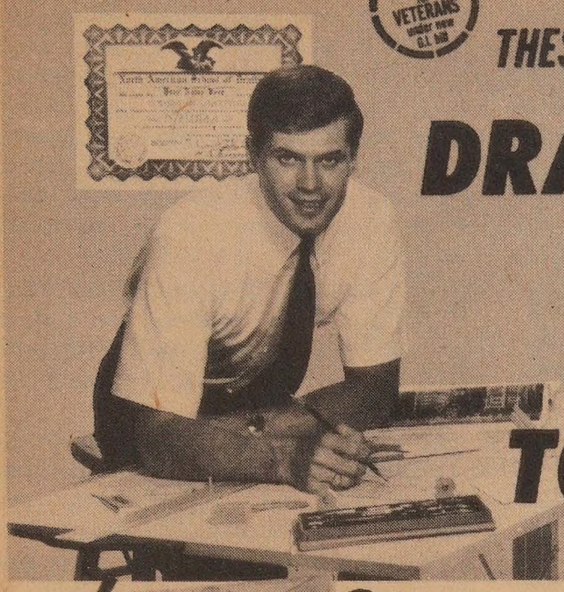

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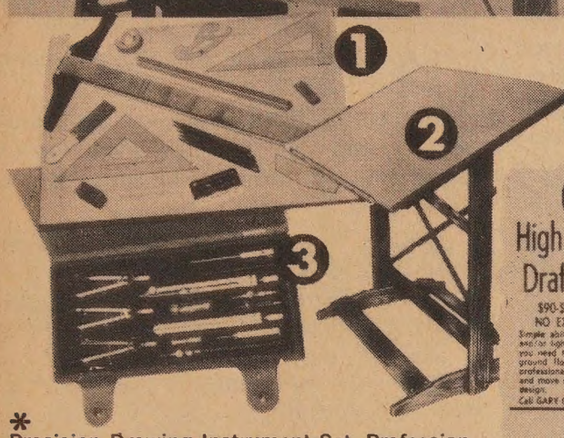

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(The following quotes from U. S. Labor Dept. point out nationwide shortage for Draftsmen)

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"Steadily growing employer requirements...were accompanied by marked reductions in the supply of draftsmen available."

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Today's population explosion guarantees boom in building of homes, churches, schools, factories, office buildings & warehouses is just starting. Thousands Architectural Draftsmen needed NOW because drawings must be made of every part of every building before ground can be broken.

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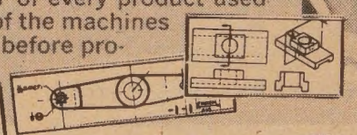

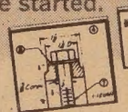

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cupped in his paws, that little tail softly patting the ground. He knew that when the train came, his friends would bring him more food than he could possibly eat.

After he had eaten his fill he would follow the train crews around until they finished their work and played with him a while and left town.

But one cold, snowy day his railroad friends found Spotty in his usual waiting place, dead of old age. Loving hands dug the grave, promised a box for a coffin, and reached into pockets to pay for the little headstone. They laid him to rest in the place where he had always come to meet them. Close to the trains and men he loved on the Monon right-of-way.

L. H. Lemley adds: "I am told that on a warm summer day, as the evening shadows fall and a million fireflies light up the countryside, if you look real close when the Monon freight local is switching the old Lone Star plant at Limedale, you can see the ghost of a little white spotted dog following the train crews as they do their work. That is, if you look real close."

Freeman Hubbard, who has a long chapter on railroad dogs in his *Railroad Avenue*, wishes he had learned the foregoing story in time to include it in his book. ●

THE OLD railroad town of Mauch Chunk, Pa., once the home of millionaires, was renamed Jim Thorpe in 1953 for an Indian athlete who died a pauper. Founded in 1815 as a great railroad center, Mauch Chunk was home to 12 coal and railroad tycoons. Best known among them was Asa Packer, third wealthiest man in the United States in 1870. His home, the Asa Packer Mansion, is owned now by the borough of Jim Thorpe.

On a hill overlooking the town and the Lehigh Valley Railroad (which Packer owned), the 109-year-old mansion still stands in all its Victorian splendor and is open to the public.

Long after Asa Packer's death, a Lehigh Valley passenger train was named for him. ●

HOW many readers know about the billygoat that was given an official pass to ride trains of a now-abandoned railroad? The pass was a small brass plate fastened to the animal's collar. It said: "Pass William Goat over the lines of the Colorado Midland during his lifetime."

"William Goat" was truly representative of his name, for he was a large, active creature. To get the full story time must go back to the turn of the century—year, 1906, the year this magazine was founded.

In 1906, as the result of a new law abolishing railroad passes, the Colorado Midland Railway canceled all but one of its previously-issued passes. That one was the brass plate we have just mentioned.

The animal's owner presented him to the Midland employes at Basalt.

One day Mr. Goat boarded a passenger train and rode to Glenwood Springs. Trainmen knew that Basalt gang's goat. The pampered animal was made comfortable and fed with scraps from the diner. He returned to Basalt on the next inbound train and was so impressed with the treatment that he made the Glenwood-bound round trip a more or less regular habit.

Each day at ten o'clock when the train stopped in Basalt to switch engines, William would climb aboard and seek the diner. After being fed, he would curl up in a corner until the train drew into Glenwood Springs at 1:30. Dismounting, he would then loaf around the yards until a Basalt-bound train pulled in. He was always the first passenger aboard.

What finally happened to the goat is not a matter of record. ●

RAILROADERS as a whole are inventors. They've devised stokers and chair cushions, collar buttons and perpetual motion machines, always hoping to clean up a million dollars. Cases where they got the million are so few that you could ignore them if it were not for "Stormy" Kromer who invented the cloth cap once widely used in engine cabs, a peaked cap that pulls down over the ears.

One autumn day in 1905 the wind was howling through the cab of a Chicago & North Western locomotive switching near Kuakauna, Wisconsin. George J. Kromer was fireman. Engineer, fireman, and head brakeman were hanging onto their caps, which were just bandannas wrapped around their heads. The brakeman let go of his—and cracked into profanity as a wind squall whipped it 30 feet down the track.

That night Kromer said to his wife: "I figure that by shaping some cloth and putting a sunshade on it, you could make a good strong cap not so likely to blow off."

Mrs. Kromer went to work with some heavy material, perhaps mattress ticking, and made a neat headgear which George wore the next day.

"That's my idea of a cap," his engineer said with envy. "I wonder if you could get Mrs. Kromer to make me one like that."

Another fireman said so, too; and Stormy and Ida Kromer soon found themselves in the hat business on a small scale.

Stormy was the least likely man in Kaukana to make a million out of anything. Genial son of a local hotelkeeper, lazy to a degree, he had been a baseball player for years before he drifted into railroading. The men at the roundhouse said that if anybody but Stormy had the cap he'd make a million.

When Stormy heard that remark, he got another idea. During one of the many layoffs, he shuttled over to Milwaukee, where he knew there was a cap factory. The manufacturer looked over his cap dubiously and finally said he could produce them.

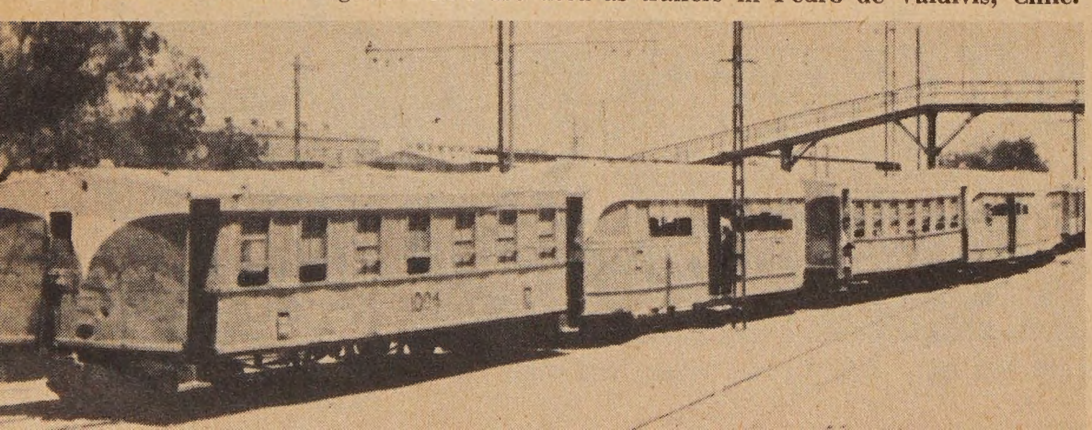
Stormy told him to make a hundred dozen. Later, he chuckled as he told how he made his first sale. He just walked into the railroad lunchroom one day wearing the cap. Engineer Charlie Clark took a good look at the headgear, snatched it from Stormy's head, threw 50 cents on the counter, and left in great haste.

Other men bought caps, but a hundred dozen is a lot of caps. Stormy ran small ads in enginemen's magazines, which disposed of quite a number. But the money did not come in fast enough to please the Milwaukee cap factory, so Stormy paid his account with them and set up as a manufacturer himself at Kaukauna.

They had their ups and downs, and other firms competed with them; but the Kromers finally made their first million dollars. Their famous cap is still being used today and is widely advertised, according to O. W. Brooks, R.D. 3, Emporium, Pa. 15834, who sent us the foregoing article. ●

Photographed by James S. Miller in March, 1969

Streetcars discarded by city lines in the United States are often sold to foreign lands. These Los Angeles PCC's are used as trailers in Pedro de Valdivis, Chile.



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WORK PART-TIME OR FULL TIME

EARN AS YOU LEARN

NO SELLING OF ANY KIND

ONLY AVERAGE EDUCATION REQUIRED

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IN a matter of weeks you can know exactly how to investigate the facts about an accident or fire; properly estimate the loss, then help distribute the millions of dollars insurance and transportation companies pay out *every year* to cover damages and injuries. For many men this is a golden opportunity to get into one of today's most exciting new professions, while there is still plenty of room at the top. 200 million accidents this year will require so many more trained investigators, starting pay and extra benefits can equal about $8,000 a year!

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Dave Durant increased his income 50 per cent, soon as he became an Accident Investigator. Bill Waddell's company has given him a fat raise every year. He now has a handsome five-figure income. Anthony Allen, a college graduate and registered pharmacist, switched to Accident Investigating and almost doubled his earnings. Bob Pritchard reports companies in his area are offering qualified investigators as much money as college graduates are getting. Read more about these happy men and their exciting new careers in our FREE Brochure.

SIX GOOD REASONS

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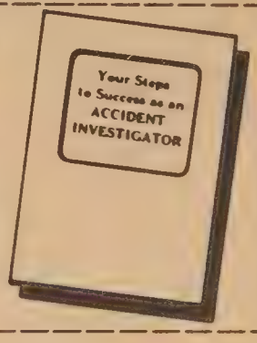

If you've always wanted a BUSINESS OF YOUR OWN but never had the money to get started, here's a honey for you ...
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GET INTO THE "ODD SIZE" SHOE BUSINESS

80
OUT OF 100
of the people you meet wear "average-size" shoes (and your Mason catalog has 275 styles for them).

20
OUT OF 100
of the people around you wear "odd-size" shoes.... and your Mason catalog gives them 10 times the selection of anyone else in town!

2½ to 16...AA to EEEE

Wouldn't it be something, if you had a monopoly on shoes, and everyone around had to buy their shoes from you? That's impossible, of course — but see if this doesn't sound almost as good:

Lots of people living right around you have a real problem finding shoes they like because they have a foot that's larger or smaller, wider or narrower, than average. Most shoe manufacturers concentrate on the "average" sizes — so the man or woman with an "odd-size" foot is lucky to find ANY style in his or her size. These people have always had to pay a king's ransom to have their shoes made, or take what they could get.

THAT'S WHERE YOU COME IN

The Mason Shoe Mfg. Co. is a giant shoe manufacturer — makes and sells more than a million pairs of shoes a year through men and women like yourself, all over the country. And since all the shoes are shipped from one giant warehouse, we carry BIG STOCKS of "odd-sized" men's and women's shoes all the time — a huge selection of sizes, widths, styles and colors. So when you show our catalog to a man or woman with an "odd-size" foot, they realize right away that YOU'VE got ten times the selection they can find in stores!

275 STYLES — — BIG PROFITS

All you do is write the order, pocket the deposit — that's your profit — and send the orders to us. And those orders and profits have a way of adding up fast, too, because you can make anywhere from $2 or $3 profit on regular-priced styles on up to $10 or $12 a pair on deluxe shoes — and you can sell several pairs in a single evening! And, this is a REPEAT business, with profits that can go on year after year. FREE SHOES FOR LIFE for producers, too!

COSTS NOTHING TO INVESTIGATE

Best of all, it doesn't cost you a penny to get into this dream business, ever. We furnish everything you'll need! Just mail the coupon for our Catalog and order-writing outfit...then decide if you want to go ahead (no need to return the outfit, either way). Check into it — mail the coupon now.

Mason Shoe Mfg. Co., Dept. H-502
Chippewa Falls, Wis. 54729

Rush the full story telling how you'll set me up in my own Mason "Odd-Size" shoe business — and send along everything I'll need so I CAN GET STARTED RIGHT AWAY.

Name _____
(please print)
Address _____
City _____ State _____ Zip _____

Photographs of the Month

Trackside train-order stands are gradually replacing the old system of telegraph operators handing up the flimsies to waiting trainmen. This stand is located at Raleigh, N.C., on the Seaboard Coast Line.
Tom Kelcec, 20 Fairfield Dr., Convent Station, N.J. 07961

Westinghouse Air Brake Co. photograph

A new pattern in the sky: on New York Port Authority Trans Hudson Corp. (PATH), a crossing gate mechanism operates the smashboard. The Newark, N.J., drawbridge can be seen in the background.

Kathy Nagel, Southern Pacific steno, points out the railroad system's street number at the general offices in San Francisco. Formerly 65 Market Street, the change was due to the removal of nearby buildings.

The Arizona Scenic Railway now runs this Santa Maria Valley 2-8-2 over the Apache Railroad tracks. In photo of June '68, engine No. 100 passes some lumber cars near McNary, Ariz.
Joseph A. Mannix, 33-18 161st St., Flushing, N.Y. 11458

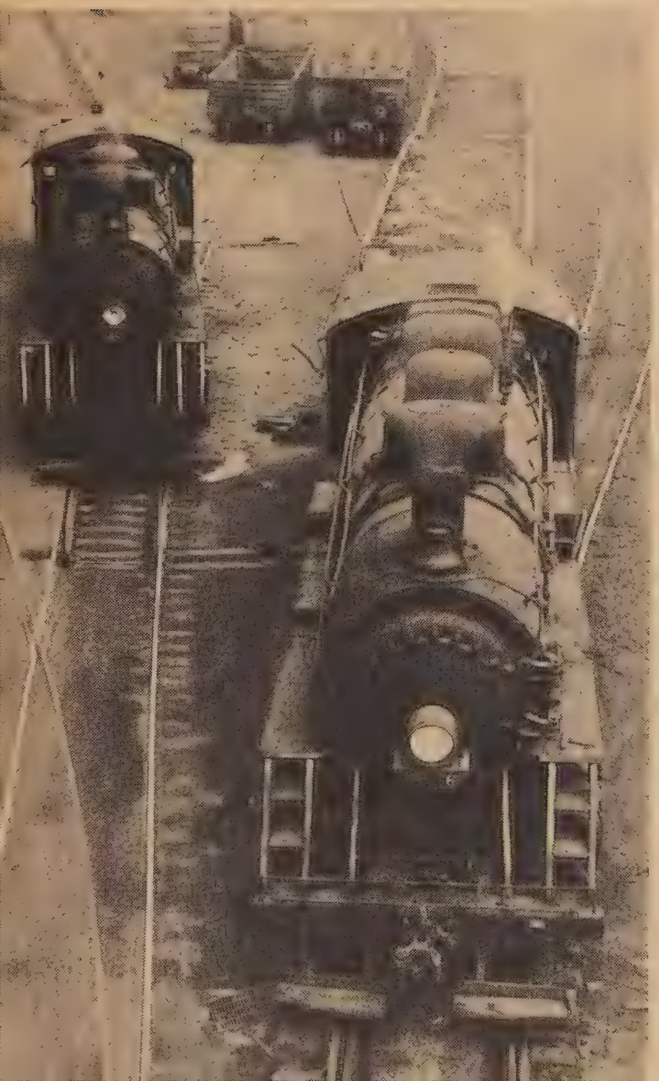
Jean Carney, age 21, leans out of cab window of Monticello & Sangamon Valley's 0-4-0, which is slated this spring to run over four miles of former Illinois Terminal right-of-way, now owned by the M&SV. Her granddad was an Illinois Central hogger, Fort Dodge, Iowa.
Photographed by Joseph A. Mannix

A long string of empty hoppers, destined to be refilled, is pulled by Pennsy engine No. 9683 as she thunders across the famous Rockville Bridge on the way to Altoona, Pa.
Don Wood, 3 Ned Drive, Matawan, N.J. 07747

Marianne Fitzpatrick and Jessie Wheeler are only two of the Metro Mini Maids now working on the Long Island. (See page 26)

State Railway of Thailand train, wheeled by engine 835, passes a marsh just outside yards at Nakhon Ratchasima.
Photographed in February, 1969, by C. W. King

Wm. Raia, 4828 W. Hutchinson, Chicago, Ill.
No. 6 pulls loads past No. 38 at Northwestern Steel & Wire plant, Sterling, Illinois. After the old 6-spot has cleared the yard, the other switcher locomotive will work the scale track.



Night shot of train-order stand on the Ann Arbor at Milan, Mich.
Samuel L. Breck, Jr., 306 Westwood, Ann Arbor, Mich. 48103

On May 16, 1962, when the National Railways of Mexico had plenty of steam power, this shot of engine 33A with train No. 49 (Escobedo to Acambaro) was made at Calaya. Photograph by Elmer Treloar 101 California, Highland Park, Mich.

Photograph by a Newsday (newspaper) photographer

A "snow flurry" on the Long Island at Easthampton, N.Y., stopped train 4008 on February 9, 1968.

THERE are, or were, as everybody knows, two breeds of turbine locomotives, steam and gas. This is the history of both, beginning with the steam variety.

Electric traction has always been an advantageous motive-power concept. Regrettably, the high initial cost of power plants and booster stations, plus building and maintaining the catenary systems, has made its use impractical on all but the most heavily traveled lines. The idea of a mobile electric power plant without this high capital expenditure has had much appeal for locomotive designers.

In 1894, the year of the great Pullman Strike, the first such engine was built. An opposed piston reciprocating steam engine powering an electric generator fed the traction motors. Besides being too small, this early device—built by Brown, Boveri of Baden, Switzerland, had many mechanical difficulties.

Two years later the same firm built the first practical electric-transmission locomotive. This larger unit was designed by Robert Heilmann, a French engineer. Its six-cylinder, vertical, steam engine developed 1,350 horsepower at 400 revolutions per minute. Two DC electric generators were coupled on the crankshafts at each end. A conventional boiler providing 185 pounds per square inch was adequate. Electric motors of 125 hp apiece powered all axles on two of the eight wheel trucks. But just why did locomotive designers depart from traditional reciprocating steam and experiment?

Rugged, flexible, and reliable as it was, the conventional steamer suffered three major drawbacks:

(1) Overall thermal efficiency in the best of engines was only 10 to 12 percent.

(2) Severe dynamic augment due to the pounding of connecting rods and their counterbalancing took heavy toll on trackwork. This limited the size and power of such ultimate designs.

(3) The thrusting stroke of its piston drive failed to provide a constant torque of power, while the maximum power was during mid-stroke, with absolutely zero push toward the end of the stroke.

In 1907, Italian designer Signor Bellizzo built an experimental 0-2-2-0T. This was the first locomotive to use steam turbines. Two turbines flanked each side of her. Steam fed all

The Story of TURBINE LOCOMOTIVES

by Michael A. Eagleson

All of the Union Pacific gas turbines of this order featured an open-sided catwalk.
Union Pacific photograph

the turbines before being exhausted through the stack. Each turbine drove a wheel independently.

The North British Locomotive Co. ordered one early type, the Reid-Ramsey turbine-electric, in 1910. Two eight-wheel trucks carried the unit which had four DC series wound traction motors with their armature built on four power axles. The 3,000 rpm impulse turbine drove the generator which supplied 600 volts. A regular locomotive-type boiler supplied the superheated steam. Cooling water came from the engine's water tanks, while the exhaust steam fed an ejector condenser. Little is known about her performance.

The British re-entered the turbine-electric field in 1920, this time with a double-framed 2-6-0+0-6-2 supporting a 200 psi boiler. Steam superheated to 300+ degrees went to a multi-stage impulse turbine, then to a condenser which had tubes rotating in the cooling water. A fan further cooled it.

An electric generator, coupled to the turbine, in turn supplied four 275 hp AC traction motors. Each pair of motors was coupled to a pair of driving wheels by reduction gearing, then connected with the jack shaft and powering wheels through connecting rods. This huge 155-ton locomotive produced only 1,000 hp. making her far from an ideal unit of motive power. Between her poor steaming boiler and the water loss due to leaking condensers, this engine proved to be a failure. She was scrapped in 1924.

Prior to World War II, much research was done in Great Britain, Germany, and Switzerland on condensing turbines, particularly those with mechanical transmissions rather than those with electric traction motors.

In 1921, the Swiss Locomotive Works built an engine with a Zolly impulse turbine located in front of the smokebox. When running in reverse she used a separate smaller turbine for power. The forward turbine produced 1,200 hp and drove the wheels through reduction gearing to a jack shaft with connecting rods. A surface condenser flanked each side of the boiler and used the tender's cold water to cool the turbine. The boiler worked at 170 psi. This engine also joined the growing list of interesting flops.

As an offshoot of the Swiss locomotive. a Krupp turbine was designed in 1922. The main difference was the condenser, located in the tender, which featured split tubes rather than the conventional type. This gave a larger evaporating surface. Three small auxiliary turbines drove a condensing fan, a draft fan, and an electric generator for lighting. These were in addition to the main forward drive turbine and the smaller reverse one. Unfortunately, the reverse turbine always remained engaged when running forward, thus absorbing over 400 usable horsepower.

A more successful turbine, though similar, was built in 1921 by Maffei. She ran for years in German passenger service. This indicated that when the bugs were worked out of non-conventional engines, they could hold their own with their reciprocating steam cousins.

The early Reid-Ramsey turbo-electric which we have mentioned was built into the Ramsey Mcleod turbine of 1924. This North British Locomotive design was a single tenderless unit, having the boiler, condenser water tanks, and bunker mounted on a single frame bed. A unique truck system was evident in the 4-4-0+0-4-4 wheel arrangement. The four-wheel guide trucks were unpowered.

A 500 hp turbine mounted on each truck drove the locomotive with double reduction gears powering the driving axles. As in the 1920 Ramsey turbine-electric locomotive, her great weight of 135 tons produced a meager 1,000 usable horsepower.

The 1924-'28 period brought the Ljungstrom turbines. Four locomotives were built, having 2,800 hp and 2,300 hp and two with 2,000 hp respectively. High boiler pressures for the times

Alco/GE gas turbine-electric demonstrator, built in 1948, was finally purchased by UP and became their No. 50.

(280-300 psi), drove the turbines, which were carried on a separate vehicle from the boilers. The Ljungstrom air-cooled condenser rode on the same frame as the turbine.

Of the four turbine engines built, one went to the Swedish State Railways in 1921. She was rebuilt in 1922 but withdrawn two years later. The metre-gage oil-fired Argentine State Railway got another, in 1925. That one used only 4 percent of the water needed by a conventional engine, but proved to be too complicated for the railway's unsophisticated shopmen. She was removed from service in 1931.

Britain's London - Midland - Scottish Railway ran the third experimental type for two years on trial runs. Her only important economy was a huge saving in water consumption but not in fuel. The final model of the four went to Sweden in 1927. Similar to the LMS design, she sported many modifications; and she remained in service until 1939.

Sweden's interest in unconventional power continued in 1932 when the Grangesberg-Oxelosund Railway produced a unique 2-8-0 design. She was built by Nydquist & Holm but was planned by the Ljunstrom Co., a leader in turbine power. In this engine a 2,000 hp turbine was mounted ahead of the smokebox and drove the coupled wheels through the typical reduction gears, jack shafts, and connecting rods. An unusual screw reverse changed the gearing and enabled the locomotive to back up. Powered by the same turbine that was used in going forward, she departed from regular practice.

This breed needed a separate smaller turbine to back up. The boiler carried 185 pounds at the gage, and at 85 percent of that working pressure it produced 47,400 pounds of tractive effort. She was a success in that she was simple and powerful and saved 10 percent on fuel bills over existing reciprocating power.

This tremendous Swedish success led Britain's LMS in 1935 to consider a further non-condensing turbine. Taking the standard Stanier four-cylinder reciprocal 4-6-2 design, two conventional steamers were built, plus the one which was to become the experimental. No. 6202 was developed jointly with the famous Ljungstrom Co. and Metropolitan Vickers. The former company supplied the turbines and gearing, the latter the blueprints. The Stanier 4-6-2 turbomotive differed from the Swedish design in that she had a main 2,600 hp forward turbine plus a smaller reversing unit. The 250 psi boiler

The largest passenger locos in the world, steam turbines 500-502, were built for the C&O but proved to be failures.

was the standard dimension for the well-known *Princess Royal* class and was interchangeable.

Although an experimental, she had the longest serviceable life of any such turbine, hauling mainline expresses for 15 years. Her main failure was the inability of the small backup turbine to push a long train into a station for loading passengers. She had only two major breakdowns in regular service, but both were costly to repair and kept the engine out of service for months. Had the railroad stored spare parts for such emergencies, those long out-of-service delays would have been avoided. In 1952 the 6202 was rebuilt into a conventional four-cylinder Princess Royal class, renumbered 46202, and named *Princess Anne*. But she didn't enjoy a continued longevity, for in that same year she was almost totally destroyed in a wreck at Harrow and she had to be scrapped.

Finally, in 1938, the United States entered the turbine locomotive picture with the Union Pacific's two unit experimental Nos. 1 and 2. These engines, built by General Electric, featured a 2,500-hp turbine designed to operate as a single unit but which could run in tandem to make a 5,000-hp motive power package. Both were styled similar to the first *City of Denver* streamliners. They had strong boilers which fed the turbines, driving the generators to supply electricity for the traction motors.

Delivered at Council Bluffs, Iowa, on April 3, 1939, they were proudly shown off to the press. Later they almost missed their own publicity portraits when they whined past the appointed photo stop on the Lane Cutoff outside of Omaha, Nebraska. The photographers were forced to chase the train across country until they got ahead and flagged it for their photos.

Mechanical troubles plagued those experimentals from the start. They ran trials over the Great Northern, Northern Pacific, and New York Central. The 550-ton locomotive had 340 tons of its weight on the drivers for adhesion.

Interior view of Dynamometer car behind Alco locomotive shown on facing page.

Pennsy's S-2 class 6-8-6 steam-turbine 6200; built in 1946, scrapped in 1949.
Rail Photo Service, 125 Kennnedy Memorial Drive, Waterville, Maine 04901

George C. Corey, (Rail Photo Service)
N&W No. 2300, the *Jawn Henry*, was world's largest single-unit loco in 1951.

This produced an impressive 162,000 pounds of tractive effort at normal speeds, with a top speed of 110 mph producing 93,000 pounds of tractive effort.

The units toured the road on a publicity trip with 4-4-0 No. 58, advertising the motive power progress on the Union Pacific. Humorously, the aged American Standard which doubleheaded with the turbine was a more dependable locomotive.

World War II arrested further experimental efforts on turbines—followed alas!, by the wholesale conversion to diesel-electrics. Probably the most famous of all steam turbine locomotives was the Pennsylvania's 6-8-6 class S-2 No. 6200.

The British turbomotive's success largely influenced the Pennsy into contacting Baldwin and Western Electric to produce an experimental turbine in 1940, but the outbreak of war prevented immediate production.

The original plans called for a 4-8-4 which would develop 6,900 hp; but when the project was resumed in 1946, the restrictions on using lightweight alloys prohibited the building of a four-wheel trailing and leading truck, so a heavier metal was used. This added weight necessitated a six-wheel design to spread the load.

The main turbine was powered on the middle driving axles, with connecting rod drive to the first and last pairs of drivers. The reverse turbine produced a meager 1,500 hp. The forward tractive effort was 70,000 pounds, the reverse turbine 61,000. The reverse gear was clutched in and out of gear when needed, featuring quadruple gear reduction unique to this loco.

The stoker-fired boiler popped off at 310 psi and produced 95,000 pounds of steam per hour. Equipped with Timken roller bearings, the engine could handle 1,000-ton expresses at 75 mph. This she did on her regular 580-mile daily run between Crestline, Ohio, and Chicago. During one test, she hit 105 mph with a 980-ton train. And this was with 68-inch drivers!

Unhappily, this direct-drive steam turbine fell into the hands of a diesel-minded management, and the rising cost of replacement parts and labor took their toll.

Curiously, the tender supplied to the S-2 was a hand-me-down. It had previously trailed streamlined K-4s No. 3768, which in turn got it from an aged I-1 2-10-0. Each time this tender was reassigned, the deck plate level had to be remodeled. The S-2 ran with a loud *Swosh-swosh-swosh* coming from her four-barrel stack. A large pair of smoke deflectors was later added when it was found that the soft exhaust hadn't the pressure to lift the smoke high above the hogger's eye level. She was heavy on fuel when starting, but

once under way she was economical. But alas! She, too, lost out to diesel competition, in 1949, and was scrapped.

By the mid 1940's, it was generally agreed that the great economics of the diesel-electric locomotive was just too much to ignore. Most roads were busy converting as fast as budgets and builders' delivery schedules would permit, now that the war was over. The Chesapeake & Ohio, a coal-hauling road, just didn't think it was right to use fuel-oil fired locomotives when they had so much coal on hand. They searched for a coal-fired engine with the diesels' advantageous constant torque and full power at all speeds.

Simultaneously, the C&O was planning an all-coach streamliner called *The Chessie*, to run between Washington and Cincinnati. Consulting the Baldwin Locomotive Works and Westinghouse, the C&O officials came up with coal-fired steam turbines Nos. 500-502. It was to be a less complicated machine than the 1938 Union Pacific failure.

At 140 feet long, they were the world's largest passenger locomotives and weighed 594 tons. They had the world's only 4-8-0+4-8-4 wheel arrangement. There were three axles on each main truck, and both trailing trucks drove the locomotive. It was powered by one 6,000 h.p. impulse type turbine which operated at a 6:1 gear reduction at 6,000 r.p.m's. It connected with the double-armature D.C. generators. The turbine's exhaust was used as the boiler's source of draft.

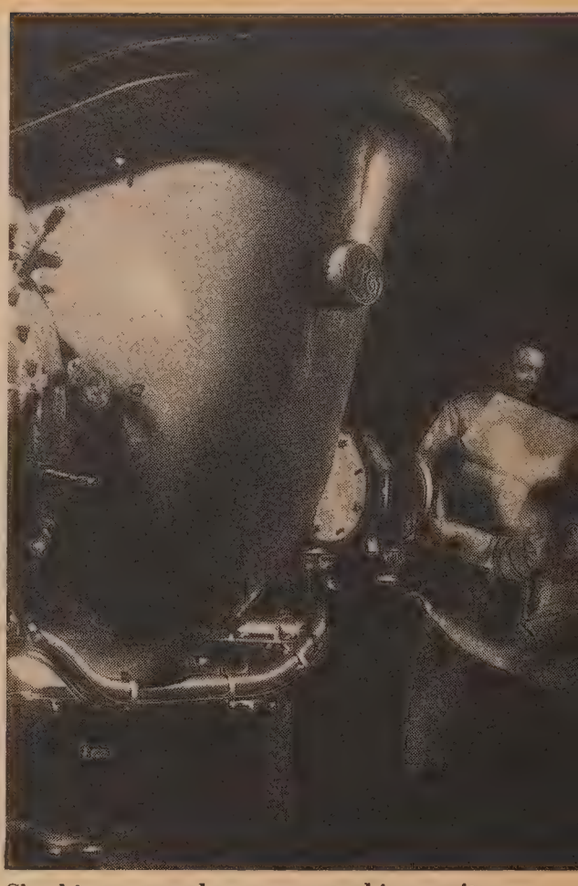
They were impressively painted in brilliant red-orange, aluminum, light gray and blue. Classed M-1, No. 500 went on a publicity tour in 1947, and in 1948 was exhibited at the Chicago Railroad Fair. Between public appearances, the monster managed to pull a few trains, but poor draft and excessive firing made it impractical for daily service. Only after the locomotive spent as much time in the shops as it did out, was it decided to drop the turbine idea as well as *The Chessie*. The train itself cost millions, and featured a lounge with an aquarium. But, even the gold fish got sick from the rocking motion and died.

The three big turbines could never match the economy of the diesels, and they too died, and were quietly scrapped in 1950 when just three years old. No more talk of coal-fired locomotives was ever heard on the C&O. Incidentally, the equipment for *The Chessie* was sold to various scattered railroads at a great loss.

Four years after the C&O's turbine had been cut up, the Norfolk & Western tried their hand at turbines in 1951 for much the same reasons as the C&O. A single non-condensing turbine-electric was built by Baldwin-Lima-Hamilton in conjunction with the Westinghouse Corporation, and Babcock & Wilcox. However, No. 2300, named the *Jawn Henry*, was built for freight.

A water tube (rather than fire-tube) boiler was used in the turbine. This came closer to efficient power station practice than any other locomotive. For the first time in locomotive history, a chain grate was used. A standard stoker fed the boiler which popped her hat at 600 psi. The 4,500 hp impulse turbine whined at 8,000 rpm's. Twelve DC traction motors, one on each axle, moved the 586-ton locomotive. All axles were powered for maximum adhesion and pulling power. At 9 mph an amazing 144,000 pounds of tractive effort was achieved. Timken roller bearings were applied to all axles as in standard diesel-electrics.

The front of the engine had a coal bunker with a water tender coupled behind. A continuous automatic boiler blow-down arrangement supplied softer boiler water. This was the world's largest single-unit locomotive and showed a 30-percent economy in coal consump-



Checking controls on gas turbine unit of Alco-GE No. 101 (see page 20).

First U.S. turbine, built in 1938 by GE for Union Pacific. Mechanical difficulties limited this steam turbine's use.

tion over a standard reciprocal steamer. The Westinghouse automatic controls were its weakness, however, and gave delays and heavy maintenance costs. After only four years in regular service, she was scrapped in 1958.

Gas Turbine Locos

The first record of a gas turbine comes from Russia in 1887. Built by General Kuzminske, it was never applied to a locomotive because it was not successful. The first use of a gas turbine powering a locomotive was in 1922. This, too, was a miserable failure because the turbine blades could not stand the high temperature of the propellant gases used to rotate them at high speeds.

Then in 1943, the famous Swiss firm of Brown, Boveri, which we have already mentioned, produced the first successful gas turbine for locomotive use. It was for the Swiss Federal Railways, but wartime shortages hampered work on No. 1101. Actually ordered in 1939, she was not completed until years later. Producing 2,000 hp, she was intended to be used on light passenger lines where the expense of total electrification was unjustifiable. She served fairly well for a short time, but later developed troubles and eventually was retired.

The British railways tried out two gas turbines; both were introduced with their Great Western. No. 8000 was built in 1949 by Brown, Boveri. She developed 2,500 hp and gave 31,000 pounds of tractive effort at only 21 mph. She served for years on the Great Western and fortunately was equipped with simple controls and a cab at both ends. This eliminated turning at the end of the run.

No. 18100, Britain's second gas turbine, was introduced in 1951. She developed 3,500 hp, but was restricted to only 3,000 hp output in use. The starting tractive effort was 60,000 pounds for this type of locomotive. Around 1958 the engine was converted into an AC electric engine and was used for training crews for the new Manchester-Crewe electrification project. Like her sister, she was scrapped.

The Union Pacific is the world's only railroad which employed a significant number of turbines of any kind for any long period. In 1948, American Locomotive and General Electric built America's first gas turbine-electric locomotive, No. 101. After trial runs over the Nickel Plate and the Pennsy, she went west to Council Bluffs and was painted UP yellow at the Omaha Shops. She then headed toward California, pulling 4,780 tons and two private cars. Tests were made in 1949 over all of the UP's mainlines between Council Bluffs, Los Angeles, Ogden, and Portland. She performed well, especially on the ruling grades up Sherman Hill and the Wahsatch range. During this time she was No. 50 for the UP. This 83-foot double-ended loco packed 4,500 hp at 6,000 rpm.

J.W. Stonebraker, Union Pacific road foreman of engines at Rawlins, Wyo., tells us that gas turbines are sometimes referred to as as "big blows"—also as "bird-cookers" because small birds flying low over their exhaust crumple in the intense heat.

"Pigeons used to roost and nest in overhead coal-chute facilities," he says, "but became wary of turbines and would fly out of a coal chute in swarms when a turbine was about 10 car-lengths away.

"Sometimes turbine exhaust melted overhead communication wires. In several instances turbines failed in tunnels, burning ears and eyelids and singeing hair of employees. Once turbine spewed unburned fuel in droplets onto the white shirts and straw hats of a trainmaster and an assistant superintendent."

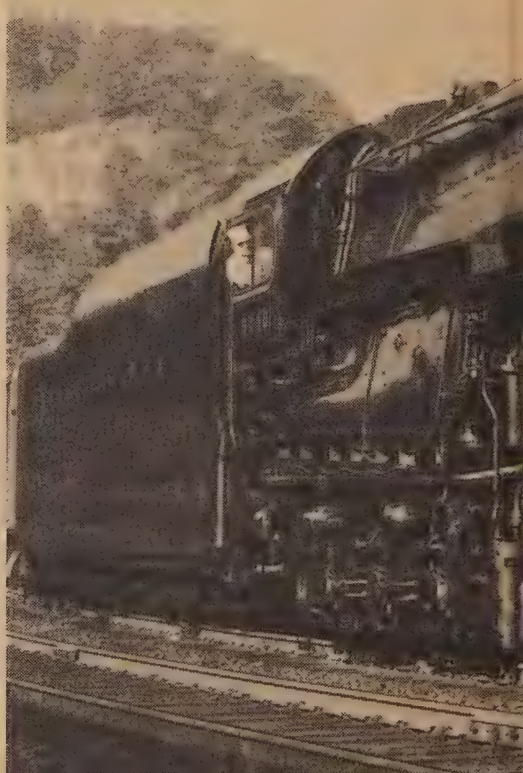
Surprisingly, against the opinions of all experts, the gas turbines worked well in warm climates and even better in cold weather. They did not choke up in tunnels and even reduced maintenance costs over regular steam power.

The class has been a success previously unknown in motive-power history for radical locomotive design. In 1952, ten more engines went into freight service between Ogden, Utah, Cheyenne, and Omaha.

Another view of Pennsy's powerful S-2 steam turbine, the 6-8-6 class, shown on page 22.
Photograph by A. F. Sozio

Rail Photo Service

Union Pacific gas turbine locomotive rumbling through rugged Weber Canyon with a freight train is seen emerging from a tunnel near the spectacular Devil's Slide.



In 1954, an additional 15 units were ordered, with external walkways on the body sides. Larger 24,000-gallon tenders were added to the locomotives' own 7,200-gallon on board fuel tanks. The added weight of the fuel helped tractive adhesion.

Multiple train control was designed to run the turbines in tandem with one crew. At first, the units were coupled back to back, with the tender between. but longer multiple-control cables ended this practice, and they doubleheaded in the usual manner.

Fifteen more 8,500 hp units were delivered in 1958 to replace the famous *Big Boys,* conventional reciprocal articulated steam locomotives.

Regrettably, our most recent report has it that the last batch of Big Blows now in service may be withdrawn from Cheyenne, Wyo., by the time you read this. They served ably for years over Sherman Hill and proved again and again that their designers were correct. We know of no further turbine designs being contemplated. ●

The older UP gas-turbine-electric usually ran in multiple with one or more jeeps. Here No. 73 and jeeps 304-374B head eastward with 74 cars near Laramie in 1960.

PASSENGER TRAIN SURVEY

CANADIAN PACIFIC has asked the Canadian Transport Commission for permission to drop all passenger-train services except commuter services in the Montreal area.

A total of 18 applications for discontinuance of passenger service between specific communities across Canada has been filed by CPR and 13 by Canadian National. Among the CPR routes in jeopardy are Montreal-Toronto-Vancouver, on which the company lost millions of dollars last year, and the South Shore and North Shore services between Ottawa and Montreal-Quebec.

Canadian Pacific requires its passengers to buy meal tickets along with transportation. This guarantees business for the dining car and discourages travelers from bringing picnic baskets on board. The tickets include all meals except lunch on the first day, and snacks in the coffee-shop car or beverages in the club car.

CNR proposes to drop, in addition to the Moncton-Saint John service, its passenger runs between Winnipeg and Churchill, Toronto, North Bay and Kapuskasing, Montreal and Chicoutimi, and several others.

In all cases the right to discontinue service was sought on the grounds they were no longer economical. CPR claimed it lost $30,090,700 in one year on the services involved in the applications while CNR reported losses totalling $11,630,233 on its runs.

Prior to passage of the National Transportation Act of 1967, the railways were receiving $110 million a year in general subsidies to compensate for uneconomic rates and services. The act provided that this would decline by $14 million a year and thus disappear entirely by 1975.

Adding feminine charm to its commuter policy, the Long Island Rail Road now has on its staff 36 Metro Mini Maids who dramatize its "new look." This concept is in line with the management's restructuring to improve passenger service and customer relations. The use of Mini Maids in its pilot program was authorized last summer by the Metropolitan Transportation Authority, the New York State agency which owns the railroad.

The girls double as Mini Maids and secretarial workers. Their job is to reach the commuter and let him know that the LIRR cares. The basic idea had already been used effectively by the airline industry. The uniforms are modern blue-and-gold sunbursts, designed by Ed Barbini, but suggest to history students the picturesque garb of Medieval courtiers. (Pic on page 15.)

On their first assignment, when a nation-wide strike of signalmen threatened to close New York's Penn Station temporarily, Mini Maids at the scene passed out newsletters advising commuters of alternate ways of getting to work. In following weeks, they also handed out free coffee and donuts to commuters at Port Washington, visited Queens Chamber of Commerce and Sky Island Club luncheons, inaugurated new Metropolitan car service to Far Rockaway and Hempstead, and gave Belmont's racing fans a timely newsletter and schedule of trains to the track.

Ever hear of five passenger trains merged into one? Well, says Bob Wayner, it actually happened. Effective last Oct. 26th, the following trains were combined into one consist with a single locomotive to run between Chicago and North Platte, Neb., over the Milwaukee Road-Union Pacific route: domeliner *City of San Francisco*, domeliner *City of Los Angeles*, domeliner *City of Portland*, the *Challenger*, and the *City of Denver*.

It came about because the Milwaukee had been given ICC permission to drop the *City of Portland-City of Denver* train between Chicago and Omaha, although this two-in-one train still runs between Chicago and Savanna, Ill. So the Portland and Denver cars had to be transferred to the train which runs to San Francisco and L.A. This setup is good for winter's light traffic, but at least two sections would probably be needed for summer.

The following comment comes from W. Graham Claytor, Jr., president of the Southern and current *Interesting Railfan*: "I guess my pet aversion is the pseudo railfan who devotes much energy to attacking the railroad industry and any railroad in particular that doesn't provide him with all the passenger service he would like to see, regardless of cost or circumstances. Fortunately, most railfans understand the railroads' problems and are warm, valuable friends. Those who want to see intercity passenger service preserved can make a real contribution to it by supporting pending legislation to reimburse the railroads for losses incurred in providing this service."

"Claytor believes in running good passenger trains," writes Don Phillips, a Washington reporter, "although he wears no rose-colored glasses about the future of the passenger train. Every time he or his operations vice president (Bill Moore) rides the *Southerner* (Washington-Atlanta trains 47 and 48), which totals about once a week, one of them personally makes a walking tour of the train to inspect it."

Santa Fe's courier nurses wear new uniforms on hi-level *El Capitan*, running between Chicago and Los Angeles.

According to C. Grattan Price, Jr., who knows Mr. Claytor rather well, the latter "inherited a passenger train service which had, in recent years, been allowed to become a regional disgrace. Immediately, he put 'spit and polish' back into the service, shining up the equipment itself, boosting the morale of employes who deal with the public, and restoring *pleasure* to dining-car meals, plus a myriad of other little things which add up to the traveler's realization that, 'Hey, this railroad really *wants* passengers!'

"These things he accomplished within the rigid dictates of economics which recognize that the branchline local, the formerly old reliable 'mail and express,' and other secondary trains are dead ducks. However, Claytor believes that the public still needs and will support superior mainline passenger trains such as the *Southerner*, the *Crescent*, the *Peach Queen*, and the *City of Miami*. The Southern, under Claytor, doesn't use flashy gimmicks. Its pitch is for clean, comfortable accommodations plus dependable, convenient service.

"Claytor has not hesitated to wield a ruthless knife on passenger services which have no hope of economic viability. He is fully honest and does not

try to bamboozle the public, which is rapidly becoming more sophisticated, with regard to the cost of running passenger trains. I, for one, accept Graham Claytor's word without question, but there are some railroad executives to whom this statement does not apply in discussing passenger trains."

George Weiss of radio station WBBQ in Augusta, Ga., comments: "I'm afraid some railfans got the idea, when Claytor became the Southern's chief executive, that passenger trains would be resurrected all over the system, dining cars would reappear in abundance, and train-off petitions would cease. But understanding Claytor as I do, I knew better. He is no more sanguine about the future of the long-distance passenger operations than Penn Central or Southern Pacific officials are, and he doesn't mind saying so. But he insists on good quality for any passenger train operated on his system and he has upgraded them all in maintenance and cleanliness."

"Each year I go to the West Coast by rail to learn how much the passenger service has deteriorated," writes John L. Alheim, P.O. Box 275, Wells, Maine, who began reading our magazine in 1907, "On my latest trip I found the *Broadway Limited* not what it used to be, but in the morning I still was given a newspaper, along with my shoes shined. The *Super Chief* to Los Angeles has kept its high standards. In fact, the Santa Fe is the only road I traveled that has done so. Diner service could not be improved upon. We were offered, at no extra charge, two items not even listed on the menu: fresh strawberries for breakfast, Colorado mountain trout for lunch.

"The Southern Pacific *Daylight* between L.A. and San Francisco had a clean parlor car and reached S.F. ahead of time, but the automatic diner service was terrible. The *Cascade* is still running to Portland, at $12 extra charge but with no tablecloths or linen napkins in the diner. I found day coach service from Portland to Seattle far superior to that of the once superb *Empire Builder*, Seattle to Chicago."

For years plush, comfy club cars have made train riding more enjoyable for the well-to-do business men who commute daily from suburban homes to city offices. But one such case may be on the way out, meaning the Penn Central's *Westchester Club*, one of the 16 railroad cars that roll into New York weekdays with "Private" signs on them. Members who ride such cars pay $200 annual dues. PC has raised its rent for the *Westchester Club*, and the 48 men who ride it refuse to pay the higher rate.

Courier nurses, who have been popular crew members of Santa Fe transcontinental passenger trains since June 14, 1937, have an all-new look. Beginning last November, these girls, all registered nurses, changed from traditional military-style uniforms to a swinging ensemble of turquoise and Mesa blue, typical colors of the Southwest. Courier nurses serve aboard the bi-level *El Capitan* between Chicago and Los Angeles. Their responsibilities include assisting mothers traveling with small children and the health and welfare of all passengers enroute.

An improvement program of station and parking facilities and passenger equipment is being undertaken by Reading Company under its current purchase-of-service contract with SEPTA. The program, estimated to cost a total of $250,000, is over and above normal maintenance and repair.

As part of the program, some 25 commuter cars are being renovated in Reading car shops at a rate of about one every ten working days in order to keep the number of cars out of service to a minimum. Charles E. Bertrand, Reading president, said. The first of the renovated cars has been delivered and is now in service. The work includes painting the interior and exterior of the car, reupholstering the seats and replacing or renewing where necessary such items as arm rests, window sills and flooring.

Also in the program are repainting Temple U station in cherry and white, Temple University's colors, and repainting Reading Terminal waiting room.

The National Association of Railroad Passengers is formally opposing discontinuance of the Missouri Pacific's *Texas Eagle* trains between Laredo and Texarkana on the grounds that termination of the service "would impose a substantial hardship upon the public." Elimination of this train would cut the last direct passenger rail link between St. Louis and Texas, as well as a route to Mexico City, NARP points out. NARP filed its objection with the Railroad Commission of Texas. It contends that the service could be profitable "if any effort were made . . . to generate passenger revenue." Hearings are being held as we go to press.

An agreement has been signed in Washington, D.C., giving Hawker Siddeley Canada Ltd. rights to build an advanced type of passenger train now being developed in England by British Railways. The proposed new train would ride smoothly at speeds up to 150 miles per hour. Double-glazed windows, air-conditioning, special heat and sound insulation and new seat designs will be combined to set better standards in passenger comfort. Lightweight cars will ride on an advanced type of suspension unit, which includes a new kind of braking system.

Side-to-side slamming of the wheels on curves will be eliminated. Car bodies will bank as they round a bend in the track, giving passengers a smooth ride at high speed. Much of the technology being developed can be applied to commuter trains to give better and more reliable service at lower operating costs.

Britain's advanced passenger train program has been funded up to the equivalent of $30 million in U.S. money.

Sam Breck, Jr., 306 Westwood, Ann Arbor, Mich. 48103

Night shot of Canadian National passenger train No. 101, the *Caribou*, ("Newfie Bullet") as she gets ready to leave the St. John's Newfoundland, depot on a crosscountry run. The train was recently abandoned and replaced by buses.

We see W. Graham Claytor, Jr., repairing a locomotive model; at the throttle of a steamer; and on board the *Flying Scotsman* train en route to Anniston, Ala., with E. L. Pardee, president of the NRHS (left).

Interesting Railfans No. 86

W. GRAHAM CLAYTOR, JR.

by Freeman Hubbard

MARCH 13th, 1912, was a wild, blustery night in Roanoke, Va., with a snowstorm raging and drifts piling up. Graham Claytor, then superintendent of the Roanoke Railway & Electric Company, and his pregnant wife, the former Gertrude H. Boatwright, stayed home that night. She was expecting a baby almost momentarily and in those days most babies were born at home. A serious question arose: will the doctor get here in time with his horse and buggy?

The father-to-be wasn't taking any chances. He ordered out a special streetcar for the doctor and a snowplow to run ahead of it. But, as the saying goes, the stork won the race. A baby boy arrived very early the following morning, just before the trolley showed up with the medical man; and the lad was named for his father.

"That," says W. Graham Claytor, Jr., a longtime railfan and steam enthusiast, now president of the Southern Railway System, the only railroad with headquarters in Washington, "was my earliest association with any type of rail operation."

There is railroading in his blood. Back in the 1880's his maternal grandfather, James Boatwright, dispatched trains on the single-track Savannah, Florida & Western (now Seaboard Coast Line) at Savannah, Ga. Going back still further, James's grandpa, who had the same name as himself, was one of three commissioners in 1828 who handled the original stock certificates of the South Carolina Canal & Railroad Company (progenitor of the Southern) at Columbia, S.C., and later he helped the survey of the road's Columbia branch.

"When I was a boy," Graham, Jr., recalls, "most of my Roanoke friends had passes on the Norfolk & Western. I had only a pass on the local streetcar system."

At age 12 he began taking pictures of trains and other subjects. During the 1950's, having acquired a movie camera and a tape recorder, he and his family spent several summer vacations photographing and recording the last N&W steam in the vicinity of Claytor Lake, some 50 miles from Roanoke. This lake is a power project with over 100 miles of shoreline on New River above Radford, Va., and was named for his father. The senior Claytor is now 82, and retired from the job of executive vice president of American Gas & Electric Company (now American Electric Power Company) but still active as president of an electrical contracting firm in Roanoke.

We asked Graham, Jr., what he considered his greatest accomplishment in the railroad field and he said: "Probably my recommendation to an old friend, Stuart Saunders, then general counsel of the Norfolk & Western, that he try to get my younger brother, Bob, to join his road's law department. Stuart did this in 1951 and Bob is now senior vice president of the N&W, as well as a railfan."

We do not know of any other brothers holding positions that high on any two leading railroads. "It is inescapable," comments Julian Griffin in *The Cleveland Press*, "that Robert's name is included in speculation for the top N&W job in a few years."

Each brother has a cottage on Claytor Lake and they jointly own a 24-foot steamboat, the only steamboat in Virginia. They bought it second-hand, rebuilt it, and now, when time permits, relax from the cares of railroad officialdom by churning up the water of the lake. Both brothers also own model trains at home, Graham in Washington, D.C., and Bob in Roanoke. Both had fun years ago riding the cabs of N&W Mallets.

"I am not a model railroader," Graham tells us, "but I collect old toy trains and have a fair collection of Voltamp, Carlisle & Finch, Knapp, Ives, and Lionel. All are operable, when I can find time to use them. An old toy train always runs around our Christmas tree. In addition, I have a 3¼-inch-gage Buddy L outdoor railway in the back yard, with a locomotive rebuilt to live steam."

Back in 1950, before he had any official connection with the Southern, he

converted his Lionel 400-E into a fair model of a Southern PS-4, powered with two Lionel Build-a-Loco motors. When not in operation, this model stands on a table in his office. Graham is a charter member of the Train Collectors' Association, besides being an active member of the National Railway Historical Society, Washington Chapter. Also an honorary life member of the Northern Virginia Model Railroad Club.

"As a lifelong railroad buff," writes C. Grattan Price, Jr., of Harrisonburg, Va., "Graham Claytor has done a magnificent job in encouraging the hobby. Perhaps he recognizes that the serious railfan is a valuable friend of railroading in general—a built-in, loyal, hard-working, unsalaried staff member. He has initiated gifts, by the Southern, of many surplus passenger cars to established railfan groups and has been the 'daddy' of many steam fantrips, which have made countless new friends for the Southern. Conversely, some railroads have recently scrapped modern, lightweight, post-war sleeping cars and coaches rather than make them available to railfan groups—why?"

Our subject graduated from the University of Virginia and Harvard Law School, was president of the *Harvard Law Review* in 1935-'36. He served successively as law clerk to the late Judge Learned Hand of the U.S. Court of Appeals and the late U.S. Supreme Court Justice Louis D. Brandeis. Admitted to the bar, he practiced law for a Washington firm in the District of Columbia, 1936-'67, except during World War II.

His war record includes being commander of a submarine chaser and other Navy craft. Prior to release from active service in 1946 he was promoted to lieutenant commander. A longtime friend of his, Miss Frances M. Hammond, also served in the Navy in wartime and attained the same rank. Friendship developed into a romance. In 1948 they married. There are two children, both teen-agers: Frances Murray and Graham III. The mother is interested in collecting antique doll houses and doll furniture as well as trains of all sorts, toy and full size.

Prior to the marriage, the two families had known each other for a couple of generations. "In fact," Mrs. Claytor tells us, "there is a story to the effect that my husband's mother had her first date with my father. Being brought up in a railroad town, Roanoke (N&W and Virginian), we naturally became interested in steam engines."

(Above) President Claytor; his son, Graham III; daughter, Frances M.; and wife, the former Frances M. Hammond, on the old 750, which Mr. Claytor is keeping in serviceable condition instead of donating her to a museum. (Below) Mr. Claytor has an outdoor model railway, with an engine rebuilt to live steam, in his back yard.

"Claytor is a controlled man," says Washington reporter Don Phillips. "His actions and responses appear to have been measured quickly by some small computer in his head and then delivered by slide rule. He knows exactly what to do in any situation, from meeting the mayor of a Georgia town to facing a hostile Public Service Commission or handling an over-enthusiastic fan who forgets that he is, after all, the president of a railway.

"Graham Claytor would like to take off his coat and tie and become just another fan when there's a fire on the

grates, but he can't. He is president of the Southern Railway System and he can't forget it. He has to maintain the respect and even the awe of his employes and the public. He used to worry in private, especially when he was a vice president, that he would get a reputation as a fan rather than a railroad officer and thus diminish his effectiveness as well as his career.

"In the early days he was walking a tight-rope. He was pushing steam excursions, a policy which not everyone on the railroad agreed with. Now he can order almost any policy he wants so long as he doesn't lose enough money to worry the board of directors.

Claytor (right) in his office gets a certificate of honorary life membership in the Northern Virginia Model Railroad Club from club's president Richard J. Beller in recognition of contributions to club's well-being.

"There had been some talk that the Southern had donated the use of a train for a cancer special from Atlanta to Milledgeville, Ga. I asked Claytor how much money that special had cost his company. He fired back quickly that the trip sponsors had paid for it and that he would not run any trip that didn't at least break even on an out-of-pocket basis."

According to George G. Weiss of radio station WBBQ in Augusta, Ga., "Claytor insists that any expenses that can't be recovered with cash receipts should yield, instead, a considerable amount of favorable publicity for the railroad, and this is why his very effective public relations department 'milks' the excursion and 'gift' activities for all they are worth.

"Claytor used to help with my Cannonball Rail Excursions, including the big pair of mountain trips we ran in 1968, but lately his terms have been too rugged for us to get together on. He just won't run our trips unless all expenses can be met, and this means too high a fare. So last October we reluctantly switched to buses."

Among the gifts that Weiss refers to are 14 Southern boxcars, once destined for scrapping but now being used as sleeping quarters for staff members and campers at Camp Willow Run, a project of Youth Camps for Christ, located on Lake Gaston near Littleton, N.C.

The idea came from Mrs. Erbie W. Mangum, Jr., wife of the pastor of the Littleton Baptist Church. While she and her husband were discussing the expansion of facilities at that 13.4-acre camp, they watched a passing freight train and the woman wondered: Why not use wornout boxcars to solve the camp's housing problem?

"Erbie and I sent letters to various railroads," Mrs. Mangum says. "Some did not reply, some refused. Others expressed interest but had no cars available. But President Claytor of the Southern wrote us saying he would arrange for the donation of 14 cars."

Moving those cars from railway to camp site was a major job, but with the cooperation of two railroads, three general contractors, and a TV station they were finally lined up in train formation at Willow Run. The Southern provided the paint needed for the cars. Now the pastor is hopefully looking for a locomotive to stand immobilized at the head of those cars.

"We are also arranging to get a caboose," he says, "and have obtained plans from the Southern for building a vintage-1890 railway depot."

All of which, properly publicized, was good for the Southern's public relations.

Grattan Price recalls that in 1953 he and several other fans inaugurated the narrow-gage Shenandoah Central, the "Tweetsie," near Harrisonburg.

"Graham Claytor and his family were loyal friends of our little one-mile system," he tells us, "and when we badly needed help Graham volunteered. Then in 1968 we worked together in planning and celebrating the 100th anniversary of the first train into Harrisonburg, on an earlier railroad.

"But my favorite memory of Graham Claytor centers around the epic run of a Southern steamer, the 4501, from Richmond to Keysville, Va., on Labor Day of 1966 in connection with the national convention of the NRHS. We passengers unloaded at a country crossroads for a photo run-by. At that time Graham was a vice president of the Southern. When the 4501 thundered by, he was esconced on the fireman's seatbox, wearing a white dress shirt, a slouch hat, and a blissful grin! Railroading needs more officers who look upon their jobs as an avocation as well as a vocation. Incidentally, Graham's abilities are not confined to firing. He is also pretty handy with the throttle and air brake."

Bob Harrell put it this way in the *Atlanta Constitution*: "Riding north out of Gainesville (on an NRHS fantrip) I remarked to Bill Geeslin, assistant to the president of Southern: 'Say, your Mr. Claytor seems to be as enthusiastic a railroad fan as anybody on the train.'

"Bill replied, 'He is.'

" 'Next thing you know, he'll be up there in the cab running the whole shebang.'

"Bill smiled. 'He is.' "

Says Don Phillips: "It is lucky for the railfan community that Graham Claytor is a railfan. Otherwise, certain old steam engines, the 630 and 722, might have become scrap metal while two others, the 4501 and 750, might be dead museum pieces."

Our subject joined the Southern Railway System on Sept. 1, 1963, as vice president, law, and was elected president of the company about four years later. He also serves as president and a director of the system's companies and as chairman of the board of the Central of Georgia and other Southern-affiliated lines. The shortest road Mr. Claytor is president of is the 10-mile Woodstock & Houston feeder line, which hauls mostly pulpwood, coal, paper, and quarried rock.

"If any *one* man could be selected as being best qualified to lead the nation's railroads out if their current miasma," says Grattan Price, "Graham Claytor should be that one."

Graham is tall and lanky, eats "pretty much everything," and wears half glasses. He is an omnivorous reader. Fond of music, too, both classical and relatively modern, but not rock and roll. His collection of his own 16mm rail movies is described as "terrific."

He keeps physically fit by working and swimming in the yard of his Washington home. The Claytors have an outdoor pool, heated in cold weather and used twelve months in the year.

"Swimming in a warm pool while snow is falling on you is very exhilarating," he says.

And, of course, neither Graham nor his wife has ever smoked. The only kind of smoke they enjoy comes from steam locomotive stacks. Railfan No. 86 also fishes, hunts, sails, and water-skis—when opportunity affords. These things he likes to do on vacations, in addition to traveling, preferably by train or ship.

In 1963, before Graham became a railroad official, the Claytors joined with another family in leasing a railroad office car and taking a month's trip to the West Coast via such long-lost trains as the *Powhatan Arrow*, the *Colorado Eagle*, the *Royal Gorge*, the *Shasta Daylight*, and the *Grand Canyon*. In the car were four adults and five children. Out of the entire month they spent only three nights off-rail, two in the Yellowstone and one in San Francisco while the car was being switched from Oakland to the Southern Pacific's Third Street Station.

"I regret the passing of the steam locomotive only esthetically, not economically," says President Claytor. "If we were still attempting to run this country's railroads with steam power, we probably would not be in operation at all. By all odds, the diesel was the greatest advance of the railroad in modern times.

"Nostalgia must not interfere with efficiency. At the same time, there is room for history and for nostalgia and for participation in the experience provided by the sight, sound, and smell of an operating steamer, so long as this is kept in perspective. It is worthwhile to preserve for future generations the great contributions to technology of the past. This can be done in part by our museums, such as the Smithsonian Institution. It can also be done in this area by actual operating steam engines of an earlier era such as our 630, 722, 750, and 4501 and Alan Pegler's *Flying Scotsman*."

The 630 and 722 are Southern 2-8-0's. The latter is now in the Birmingham Shops for complete rebuilding. Although built in 1904 by American Locomotive Company for the Southern, she was sold to the East Tennessee & Western North Carolina when the diesels came in; but in 1968, after Graham became president, the Southern swapped two Southern diesels for the pair of old steam engines.

The 750, a former Savannah & Atlanta 4-6-2, also was built by ALC, for the Florida East Coast in 1910. The S&A acquired her in 1964 and donated her to the NRHS, while the 4501, the first Mike the Southern ever bought, is now owned by Paul Merriman.

These engines have been used on steam trips, about 25 of which our hero has made since becoming a Southern vice president in 1963. Graham Claytor is definitely a steam fan. You can tell that from looking at the paintings on the wall of his huge office, some of the books in his floor-to-ceiling bookcase, and other steam mementos in the room, including the handsome model of a Southern PS-4 just behind his desk.

President Claytor would like to get the last PS-4, No. 1401, out of the Smithsonian Institution to use on fantrips. If he had been president at the time, the 1401 probably would never have gone to the Smithsonian and would now be operating, although admittedly she is well preserved with a building built around her.

Our *Interesting Railfan's* son, Graham III, also is an active fan, as well as an excellent rail photographer, and has been known to chase his dad's trips with photographers Mike Eagleson and Vic Hand.

An example of President Claytor's

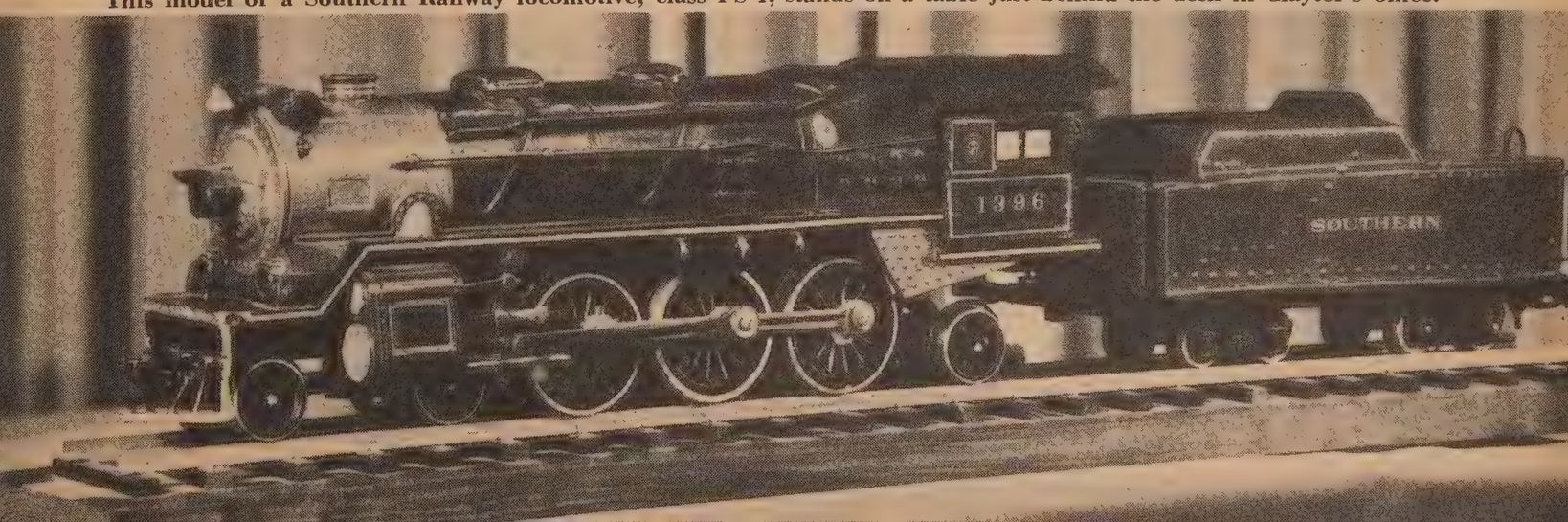
Claytor regrets passing of steam loco "esthetically but not economically."

feeling for Southern history is the fact that on one of the steam fantrips he operated, the "Georgia Peach Special" (pictured on *Railroad Magazine's* November '69 cover), the train stopped at the village of Gaillard, Ga., 104 miles south of Atlanta, so that the president could personally greet an 89-year-old lady there, Mrs. Jennie Reed, and give her a Southern travel clock, complete with dial light. As a child, Mrs. Reed had ridden the first passenger train through Gaillard in 1886 on the old Atlantic & Florida. (A separate account of Graham Claytor's views on the Southern's passenger service may be seen on page 26.)

"In this business," he commented, "we need friends, and we'll take them any way we can get them if it's not too costly." And he added: "I enjoy these excursions. Besides, every newspaper along the line will carry a favorable article."

This remark by Graham Claytor echoes our own sentiments and, no doubt, those of most of our readers: "I love to sleep on a train. I like to feel the wheels rolling under me." ●

This model of a Southern Railway locomotive, class PS-4, stands on a table just behind the desk in Claytor's office.



Car No. 144 is owned by the Illinois Railway Museum in Union, Ill., which operates it for fans. Pullman-Standard built it in 1908 for use on Chicago's streets. Known as the *Red Rocket*, it served the public until 1953. Left photo shows interior.
Charles Wlodarczyk, 5246 No. McVicker Ave., Chicago, Ill. 60630

STEVE MAGUIRE'S

TRANSIT TOPICS

Steve Maguire

ACCORDING to William J. Ronan, chairman of New York's Metpolitan Transportation Authority, the decision to abandon the trolley car and trolley bus when "the nation basked in automobile euphoria during the post-World War II period" was a mistake. He said that the shift held up research on electrically powered vehicles which could have reduced air pollution.

He spoke at the fifth annual Symposium on Air Pollution and Respiratory Disease, sponsored by the New York State Action for Clean Air Committee. It was held at the New York University Medical Center.

The automobile also came under attack as a growing pollution danger. Charles C. Johnson Jr., administrator of the United States Consumer Protection and Environmental Health Service, called it "the most important single contributor to the relentless growth of air pollution in this country."

MUSIC hath charms to pacify tense commuters during the rush hour, according to Ted Norman, a subway stationmaster in London, England, who has been drawing a good response from passengers by playing a harmonica over his station's public-address system.

IN A SUDDEN turnabout, the Nixon Administration is clearing the way for a long-range commitment of Federal funds for urban mass transit—a step that will enable cities to proceed with major subway construction.

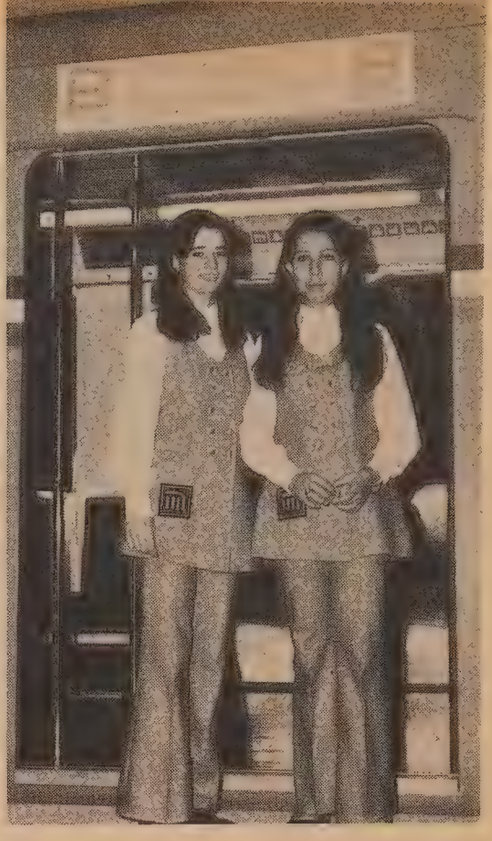
John A. Volpe, Transportation Secretary, has approved the new funding arrangement. He consented to a compromise plan designed to assure cities of long-term mass transit aid by authorizing the Government to obligate funds even before Congress appropriates them. This would guarantee $3.1 billion for mass transit aid over a five-year period, 1971-'75.

MEXICO CITY's new subway is earthquake-resistant and should remain undamaged by even very strong earth tremors, according to Agustin Perez, technical director of the line. Laser beams and ultrasonic waves for testing the hardness of concrete were among the advanced methods used in construction of the subway.

The first section of this $320 million subway, opened September 4th, cov-

A Cumberland Valley (now Pennsy) electric train goes through Williams Grove, Pa., in this rare old photograph from the collection of Harry P. Albrecht, 40 Wilton Ave., Clifton Heights, Pa. Harry, who is a railroad historian with several booklets to his credit, would like to have more information on the CV electrics.

Mexico City's spanking new subway line. (Below) Rush-hour crowd waits for train on a station platform. (Right) Two of the underground train's hostesses.



ers an eight-mile stretch between Chapultepec Park and the International Airport and will be followed, by the end of this year, with two more lines to give a total 22 miles of subway.

Excavations for the line have turned up thousands of Aztec archeological gems, which will be added to exhibits in the National Museum of Anthropology and History.

FAST rail transit between downtown Cleveland and Hopkins International Airport has been more than encouraging. Says Robert T. Pollock, general manager and chief executive officer of the Cleveland Transit System: "We anticipated patronage of 2,000 a day but have had a steady average of 4,000 since operations began Nov. 15, 1968."

The service was inaugurated after completion of a 4.1-mile rail extension of the CTS line from West Park station to the airport. Trains leave both ends of the line every 10 minutes, covering the 11-mile route between Cleveland and the airport in 20 minutes for a 40¢ fare. Only two other cities, Tokyo and Brussels, offer similar service. Visitors from England, France, New Zealand, Australia, Switzerland, and Hong Kong have come to Cleveland to get ideas for use in their own countries.

The 4.1-mile extension cost $18,600,000. Federal funds provided $12,334,000; Cuyahoga County spent $5,041,000 for five bridges; and the City of Cleveland paid $1,250,000 for parking lots. Pullman-Standard built 20 specially-designed *Airporter* cars for this service, with air-conditioning, fluorescent lighting, luggage racks, wide seats, and tinted windows.

THE ST. LOUIS Car Division of General Steel Industries, St. Louis, was low bidder by a wide margin on 120 new commuter cars to be purchased by the Chicago South Suburban Mass Transit district and leased to the Illinois Central. St. Louis Car bid $311,000 per car for a total price of $37,320,000 for 120 high-tensile-strength, low-alloy steel cars.

The first of 120 new air-conditioned commuter cars will be in operation on the IC this fall.

By 1972, all of them are to be in service on the IC's south side and south suburban routes, replacing old commuter cars.

ANOTHER setback to plans for the troubled Washington, D.C., Metro rapid transit system was delivered recently by Virginia's highest court. In a decision handed down in Richmond, Va., the Supreme Court of Appeals ruled that a key feature of the Metro financing plan violates the Virginia State Constitution. The court said the method for apportioning possible operating deficits among local political jurisdictions constitutes an illegal form of debt.

Lacking a method of making up deficits, which Metro officials do not believe will occur, a $835-million revenue bond issue planned by the Washington Metropolitan Area Transit Authority probably could not be sold, according to *Passenger Transport*, weekly publication of the transit industry.

AN OUTLINE for development of rapid transit and co-ordination with commuter lines of the main line railways has been published by the Toronto Transit Commission. It proposes extension of the subway system by three new lines in the inner districts, creation of intermediate-capacity rapid transit lines to pre-metro tramway standards, and suggests possible extensions of commuter railways to give interchange with the rapid transit network.

The plan includes the extension, at present under construction, of the Yonge subway. Following completion of the Spadina and Queen subway lines, construction of feeder rapid transit lines of intermediate capacity is suggested. These would operate through areas with lower population density and would use PCC tramcars or similar rolling stock, on private right-of-way, but with minimal station facilities and fares collected on the cars.

A NEW operating trolley museum has joined the list of more than a dozen

To save time, send *Transit Topics* mail directly to Stephen D. Maguire, P.O. Box 51, Belmar, N.J. 07719.

Station platform of the CTS Airport Extension line, which opened November 15, 1968, and speeds passengers to and from downtown Cleveland.

Mrs. Helen Ringland gets orchid corsage from Robert Korach, transportation superintendent, Port Authority Transit Corp. (PATCO). Ceremony was held at Ferry Ave. (N.J.) station.
Delaware Ricer Port Authority photograph

Four thousand passengers a day, well above expectations, ride CTS electric line which provides service for Hopkins International Airport, Cleveland. (See page 33).
General Electric photograph

such in the United States. In September, the National Capital Trolley Museum in Northwest Branch Regional Park on Bonifant Road in Montgomery County, Md., began its first trolley operation, reports Deane Mellander, U.S. Naval Facility, Lewes, Dela. 19958.

A trolley imported earlier in the year from Duesseldorf, Germany, was used to make the first trip on the new line. After the solid state rectifier had been hooked up to the power company's line, Duesseldorf car 955 moved out on to the half-mile of track and overhead —a heartening sight for fans who had spent years on the project.

Our Sept. '69 issue showed views of three foreign trolleys imported for use on the line, with an item on the progress of its electrification.

Dedication of the operating museum took place on Oct. 17th and service continued each week-end until cold weather set in. Two American trolleys are on the property, a Johnstown car and a District of Columbia sweeper.

Thus, only a few years after thousands of fine operating trolleys and interurban cars in the United States had been abandoned and scrapped with no thought of the future, new museum lines now must look overseas to find trolleys for their lines.

A PRIVATE trolley line began operating in Ohio last summer when former Ohio Public Service car 40 was hooked up to several hundred feet of overhead wire in Archbold, Ohio, and ran up and down the short track on the line built by Dr. Sterling W. King, 1001 S. Defiance St., Archbold.

The car had run on the Toledo & Eastern, a successor to OPS, until its abandonment. Then it was left on the deserted right-of-way near Oak Harbor, where it remained until Dr. King purchased it. The car, originally a box motor, had been in a collision on the OPS. Its damaged end was cut down to provide one enclosed cab at one end and a second cab, flat and open at the other end.

Power for the little line is supplied by a 300 kw rewired rotary converter. This was originally used by the Indiana Railroad but later was found in a diesel now belonging to the American Aggregates Co. A Continental engine was used to drive the generator. Help came from Ron Jedlicka of Lakewood, Ohio, still in U.S. service, who at one time worked on the Columbia Park & Southwestern museum line at Olmsted Falls, Ohio, and who took a leave from service to help Dr. King get his line

Side view of car No. 144 (see page 32). The Illinois Railway Museum has been instrumental in restoring old equipment to service, one reason why almost 45,000 passengers rode the line last year. Aside from owning this Pullman, the museum also has Illinois Terminal lightweight car 415, Chicago elevated cars 1024 and 1808, Milwaukee streetcar 972, and a steam powered train, all in occasional service. This interesting setup is only an hour's drive from Chicago and is well worth visiting.

Interior view of beautiful, new electric cars of Chicago Transit Authority.
G. Krambles, Supt. Research/Planning

operating. They should have medals for their efforts.

Dr. King is interested in Toledo & Indiana interurban, of which he hopes to write a history some day. He needs a photo of T&I car 105, which later became Georgia Power No. 475.

A NEW one-day record for patronage on the Philadelphia-Lindenwold high-speed line was set on Nov. 7th with 29,570 persons. The line began parial operation Jan. 4, 1969, full operation Feb. 15th. The five-millionth person to ride it was recorded Nov. 12th.

TROLLEY MUSEUM lines continue to give occasional aid to operating electric railway companies. For example, according to Jim Crimmins of Exeter, N.H., the Massachusetts Bay Transportation Authority recently found itself without a workable line-car and had to go to the Seashore Trolley Museum at Kennebunkport, Me., for the loan of a line-car for use on its routes.

The MBTA's own line-car was badly damaged last October in an accident which killed an employee. While operating southward on a northbound track on Riverside line it collided head on with a flatcar loaded with rail. The loose rails shot forward like spears into the line-car, badly damaging it.

In response to MBTA's request, Seashore lent its line-car No. 4, formerly from the Claremont (N.H.) Street Railway. It was trucked from Kennebunkport shops to Boston and was rehabilitated for use in the trolley subway and surface routes until the damaged car is repaired.

Similarly, in the summer of 1968 at Cleveland, when the Cleveland Transit System was behind schedule in building the new rapid transit line to airport, an additional line-car was needed to speed up construction of the overhead. CTS asked Gerald E. Brookins, who owns the Columbia Park & Southwestern at Olmsted Falls, Ohio, for the use of former Cleveland Railways line-car 026, which CTS had given to the CP&SW a few years before.

Thereupon Gerald had the line-car moved out. A CTS truck picked it up and took it to the transit line, where it helped considerably in speeding up work on the airport line. It has since been returned to the CP&SW.

New Electric Publications

Early Electric Cars of Philadelphia; 1885-1911, **by Harold E. Cox, has 136 pages, 8½x11", with soft cover binding. It may be had for $4.50 from the author at 80 Virginia Ter., Forty Fort, Pa. 18704. This is the second in a series of volumes on the rolling stock and operations of the vast Philadelphia Rapid Transit Co. and its predecessors. The first volume, published a couple years ago, covered the years 1911-'65. Besides the company history of the period, the latest book includes a detailed roster of all wooden deck-roofed equipment, both single and double-tracked.**

Dr. Cox had access to much material from old PRT files. His new book contains many good company photos. However, the average non-railfan may feel that "once you've seen one, you've seen them all," yet the juicefan will appreiate the differences in construction of various wooden deck-roofed trolleys.

Trolleys of the Massachusetts Northeastern Street Ry., **Vol. 5, by O.R .Cummings, has pages 8½x11", with soft stapled cover binding. This is the fifth and final booklet in a series on the MNE, which was the author's hometown trolley line and inspired him to become a writer in the field of traction in New England. This book is primarily for the fan, being a historical roster of the line's equipment from 1913 until its demise in 1930. Readers having copies of the prior 4 publications will certainly want this new issue to complete the story. It costs $2.87 from the author, 105 Theresa Ct., Manchester, N.H. 03103.**

Ten Years at Crich, **a 20-page story of the operating tramway museum at Crich, near Matlock in Derbyshire, England, was published by the Tramway Museum Society, 3 Oak Tree Lane, Mansfield, Notts., England, to mark its tenth anniversity. The price is 95¢ plus postage, via International Money Order, obtainable in North American post offices. This brochure records in photos the development of the museum from its beginning, with many "before and after" views of locations and equipment. It also includes sketches of how the museum may look at a future date if plans for creation of an Edwardian street scene are carried out.**

Incidentally, this museum has just acquired a formed New York streetcar. The car was built by the Third Avenue Railway System in 1939 as their No. 674. In 1949 it was one of 42 shipped to Vienna, Austria, where it became No. 4225. It was formally accepted on behalf of the Tramway Museum Society by the British ambassador to Austria, Sir Anthony Rumbold.

A worth-reading article by James A. Genthner on "Train Operation of Streetcars in Baltimore: 1919—'30" is featured in *The Bulletin* of the National Railway Historical Society, Vol. 34, No. 4, the editor of which is Alan G. Hunn, P.O. Box 2051, Philadelphia, Pa. 19103.

Before and after: Mike Eagleson made these two shots of Gainesville Midland 2-8-0 No. 301 in Gainesville, Ga., about ten years apart. One shows her in service, with man in cab window and smoke blowing lazily upward, in June, 1959, three days before the road's final steam run. In the other photo we see her in 1969, lettered *Freedom Park Spcial*.

IN SEARCH OF STEAM

with Mike Eagleson

EACH month I report a new park engine or two. Whenever I travel across the country I try to stop by and inspect these embalmed wrecks, checking each off on my list. Recently I saw an old friend, ex-Gainesville Midland 2-8-0 No. 301 which I once saw live, now welded to a concrete slab in Freedom Park, Charlotte, N.C. She was surrounded by benches for spectators to sit on while gloating over her, forming a contemporary arena, reminiscent of martyrs being thrown to wild animals.

I have seen scores of engines "preserved" in city parks, on courthouse lawns, industrial yards, station terminals, even raised on stone pedestals. Never have I seen one more hideously butchered than this display.

Her lagging was completly torn off, most of her choice parts long plucked. The cab interior a mere shell with a bare backhead. The top of her tender, cab roof and boiler sides had a strong, waist-high steel fence welded to it.

Children swarmed all over her. They obviously neither regarded it as a privilege to explore the beauty of a steam locomotive or felt like playing engineer. To them, a huge pile of trash from clean-up day would afford as much enjoyment. And what sport it was to scratch the deteriorating surface of its flanks with stones left by those who already broke the last panes of glass! After all, what other use does it have?

Yes, kids, your steam engine was given to you by the fathers of the Seaboard Air Line, not that you would learn that by reading the tender, gaudily lettered *Freedom Special No. 301*. Well, daddy, isn't that how she ran on the Seaboard Air Line when you were little?

For a brighter side, the Denver & Rio Grande's famed narrow-gage Durango to Silverton, Colo., steam run set an all-time high of 97,000 paying passengers last season. This topped the 1968 peak by 6,000.

Canadian National 4-6-2 No. 5114, long stored at the Transcona Shops, was moved to Melville, Sask., in September for display.

Laurel Mountain's 2-8-0 No. 13 (ex-BC&G), at Summerset, Pa., has recently been purchased by the Everett Railroad, Everett, Pa. That road is now operating ex-Morehead & North Fork 2-6-2 No. 11 on summer excursions. Let's hope the new owners will tastefully restore this good-looking Consolidation and run her.

Boston & Maine's beautiful 4-6-2 No. 3713, once on display at Steamtown, U.S.A., Bellows Falls. Vt., is now on view at the Museum of Science, Boston, Mass.

Reader Railroad, of Reader, Ark., is now using their 2-6-2 No. 108. Famed 2-8-0 No. 1702 has been set aside for extensive repairs. The other 2-6-2, No. 11, also is out of work because her flues have expired. So, let's welcome the long out-of-work Prairie, No. 108, back into Reader service, on the Saturday-only mixed train.

Another 2-6-2 is seeing steam again in the South; woodburner No. 107 of the Hot Springs Lumber Co., at Hog Springs, Ark. While she isn't exactly used to operate the mill, she is occasionally steamed up by the mill's owner, a railfan, whenever he feels like it. You may recall that this 1907 wood burner was once employed by the Louisiana Long Leaf Lbr. Co. at Fisher, La., but was set aside when the home-owned lumber company sold out to the big Boise-Cascade syndicate, which immediately turned over the switching duties to the Kansas City Southern.

Railroad Museum of Pennsylvania at Strasburg, Pa., has received bids from several contractors for the construction of a turntable pit and installation of an existing turntable at their museum site. Low bidder was Wickersham Inc., of Lancaster, Pa., who got the contract for $179,500. Other bids were as high as $242,900. After a review by Wm. J. Wewer, the museum's deputy executive, the contract will be awarded. Thanks, Lu Cummings of Lancaster, Pa., for keeping us informed.

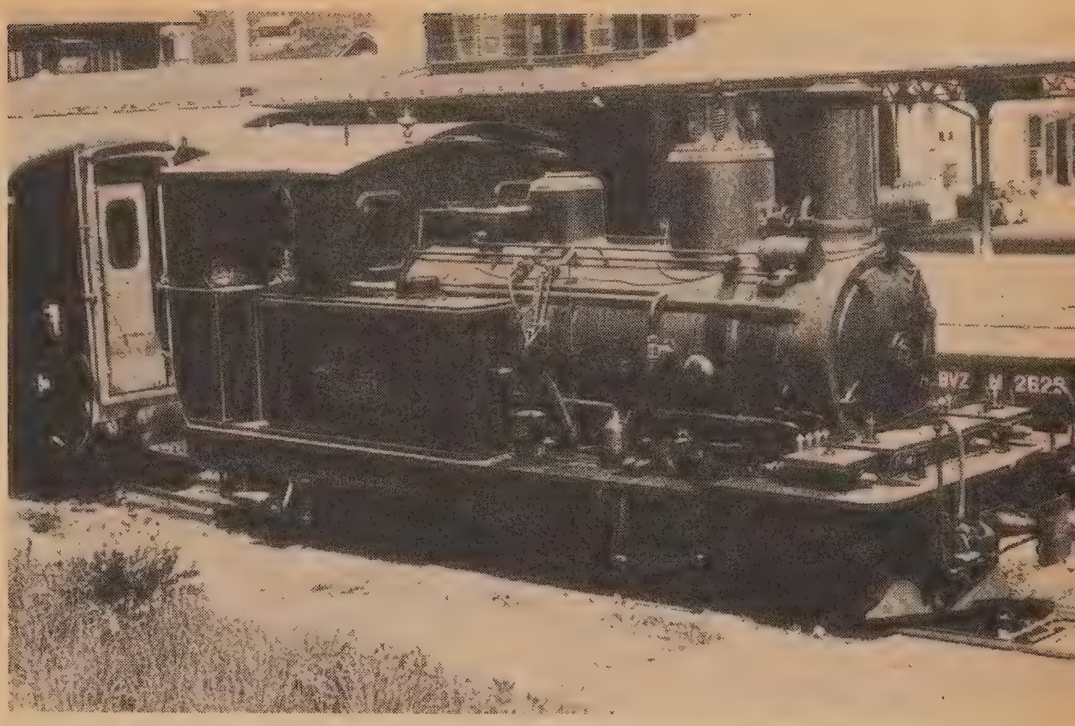
Five steamers are owned by an Illinois fan, Herb Hansen. One is an 0-6-0 No. 207, ex-L&NE, which Dick Jensen was paid to restore. Another 0-6-0, No. 5, ex-Commonwealth Edison, of Illinois, also is on his roster. Both engines are located on a C&NW spur in Elgin, Ill., stored for repairs. We hope they will be operated on the Illinois Railway Museum in a few years.

American Creosoting Co., 0-4-0ST is still in Jackson, Tenn., and is owned by Hansen. So is the lovely old 4-6-0 No. 200 of the Willis Shortline in Louisiana. This engine was the oldest steamer in regular service until replaced a few years back. Finally. Lake Superior and Ishpeming 2-8-0 No. 34 is still held in Marquette, Minn., purchased by Hansen from the Marquette & Huron Mountain. So says Thomas A. Schiltgen, 3832 Blackstone Ave., Markham, Ill. 60426. ●

Mike Eagleson does not work in our office. To save time, send steam mail directly to his home, Edgemere Road, Mount Arlington, N.J. 07856.

STEAM POWER TODAY IN SWITZERLAND

by Thomas T. Taber



This Brig-Visp-Zermatt *Breithorn* is used on the electric train whenever the current is shut off. The loco was pulled out of the engine house to be photographed by railfans last summer. The scene is at Zermatt, near Matterhorn.
All photographs on this page by Thomas T. Taber

CONTRARY to popular belief, you can still find steam locomotives, after diligent search, in presumably all-electrict Switzerland. The Swiss Federal Railways (SBB) no longer use steam power, although their roster lists five steamers (No. 2958, 2962, and 2973, all class C 5/6, and No. 8901 and 8904, class E 4/4.) Some steamers are displayed in the beautiful and very modern Museum of Transport at Lucerne; others are static exhibits elsewhere. Still others run in regular service and on lines where they are assigned to special trains or special parties.

Diesel locomotives do the switching in the large marshalling and transfer freight yards. There are only a few because the electric locos, besides performing all regular road service, both passenger and freight, handle most of the switching duties. Happily, diesel fumes are still rare in scenic Switzerland.

The Brienz-Rothorn Bahn is all steam, with seven handsome and well-kept rack locomotives. The publicity-conscious general manager keeps the passenger train, with a handsome little green steamer on the rear, parked out in the open at the Brienz station where it can be seen by passers-by on the highway and on the SBB narrow-gage trains which connect Lucerne with Interlaken. Just looking at the sparkling Brienz-Rothorn train makes you eager to ride it up to Rothorn-Kulm, for both the train itself and the majestic landscape are highly photogenic.

Right in the city of Zurich during the summer months the Sihltbahn—a narrow-gage local railway operating out of Seinau station—schedules special steam trains on week-ends with a resplendent 0-6-OT. But at Vevey, on the mainline between Brig and Lausanne, the museum-owned Blonay-Chamby Railway uses a tiny slim-gage Mallet, in addition to other steamers on summer week-ends.

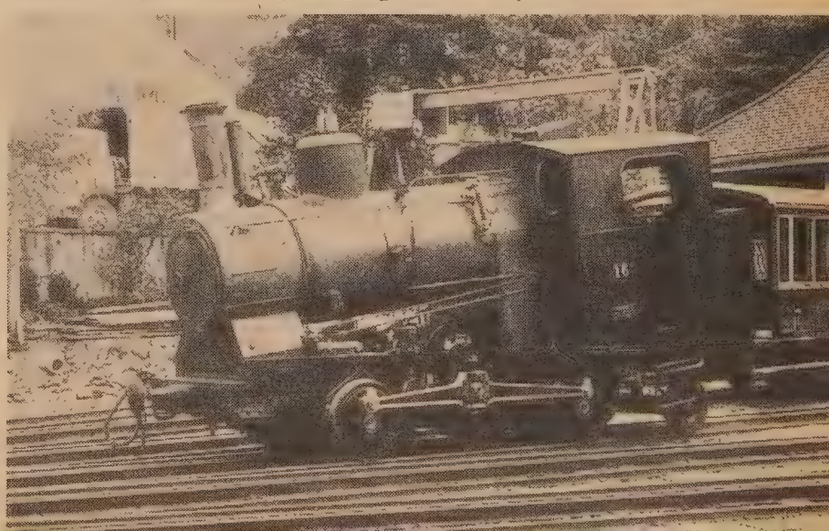
From Vitznau, near Lucerne is the Rigi, normally an electric operation. At the request of a special party it will fire up one of its little rack steamers to push the solitary car up the mountain side to Rigi-Kulm. The sight of her shoving that car up the fantastically steep incline is a memorable experience. So are the occasional whiffs of soft-coal smoke and steam with hot oil.

The average American railfan does not know where to look for Swiss steam power, but once he learns where to go, reaching there by rail is no problem because of the frequent passenger service on all Swiss lines. Incidentally, the country has a major Federal Railway system and about 75 privately-owned and privately-operated lines. The close cooperation and scheduling of all trains, regardless of the railways involved, is something you have never seen in the United States—and probably never will.

Last June, Swissair Transport, in cooperation with Swiss Railways, sponsored a two-weeks tour of the country's rail lines—Swissair Railway Festival. Twenty persons from the U.S.A., including your author, made the tour and all were enthusiastic about it. Seven women were in the party. The group had a special car on all of the trains it rode. In several instances it had special

The Rigi-Bahn has two steam rack-type locomotives which are fired up on request for special trains. Ordinarily, they are operated from Vitznau, near Lucerne, up to Rigi-Kulm.

Bodensee-Toggenberg No. 6 has been put out to pasture at Degersheim, Switzerland. Note the quaint old signal at the extreme right in this photograph made by author in 1968.



The *Amor Express* is pulled by a 2-6-2 type. Once owned by the Bodensee-Toggenburg Railway, the train is now operated by a locomotive preservation club which uses her for special occasions, such as wedding receptions.
Photograph by Thomas T. Taber

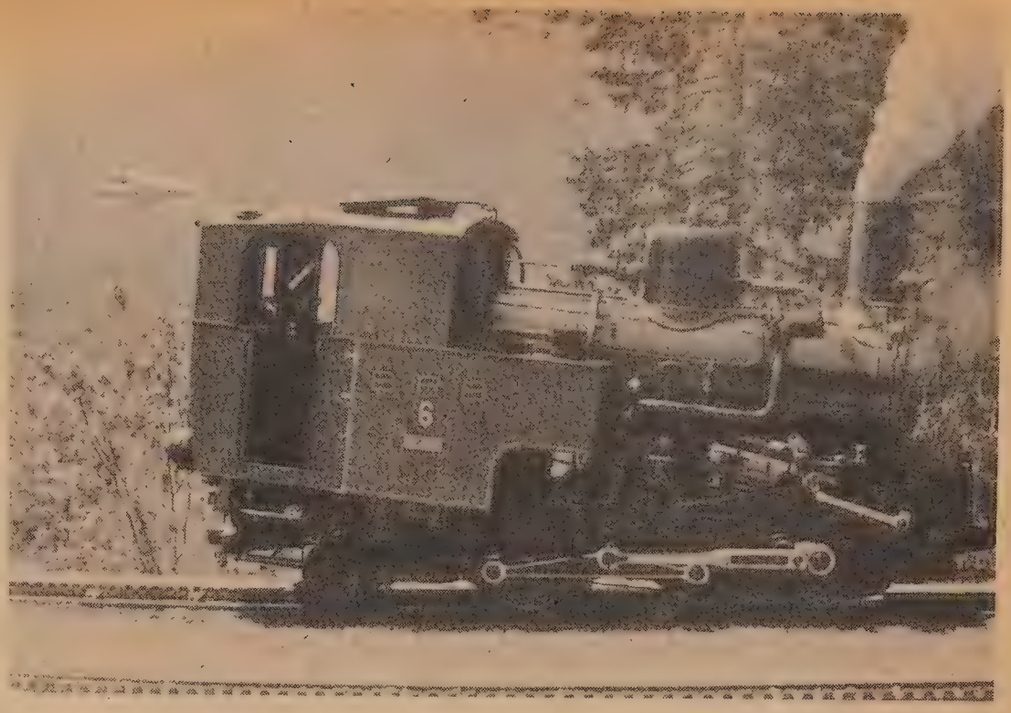
trains. One of them was the famous *Amor Express* of the Bodensee-Toggenberg Railway, which is hauled by a vintage 2-6-2 tank steamer. An organized group with a well-planned schedule can get special considerations beyond those available to an individual traveling on his own. This group did so.

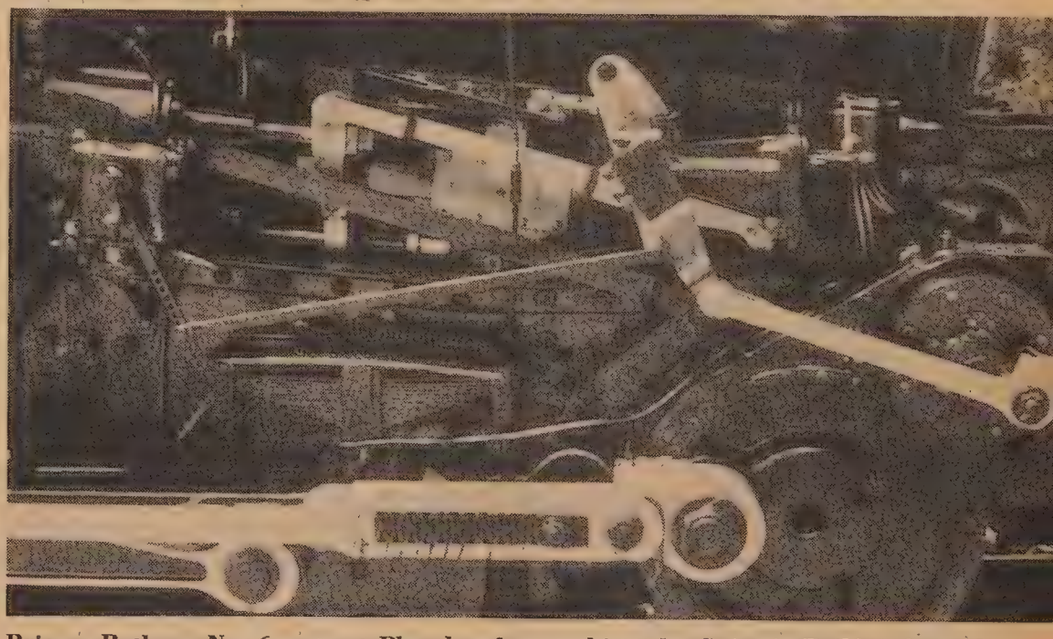
As might be expected, we discovered several obscure steam locomotives, all of them in good working order. The oldest is a fantastic, little, very-narrow-gage, rack locomotive built in about 1892, on the Schynige-Platt line. The Swiss retain this power for use on the rare occasions when the electricity is cut off. They have no stand-by diesels. Also, they see no sense in scrapping a perfectly good steamer merely because a salesman wants to sell them a diesel replacement.

Will the Swiss rail tour be repeated

next year? According to Rolf Friedlander, tour director, if there is sufficient demand for it; and efforts would be made to insure a 1970 trip even better than the 1969 version. Further information is available from Swissair, 608 5th Avenue, New York, N.Y.

Whereas the 1969 party enjoyed one standard-gage special steam train and two rack trains, also steam-powered, tentative plans for a tour to be operated next year from May 20th to June 14th include, hopefully, two standard-gage steam runs, at least one narrow-gage adhesion special train, and 3 or 4 rack steam consists—all which would be quite a record for a so-called all-electric country! As long as enough tourists are interested to help cover the costs, there is reason to believe that Swiss railways will gladly run whatever steam power may be available. ●





Brienz- Rothorn No. 6 rests at Planalp after pushing the Swissair Railfan Special up from Brienz, near Interlaken. Note the close-up of her valve gear and working parts. All the railroad's locomotives are steam and are fascinating to watch.

Thomas T. Taber, P.O. Box 363, Madison, N.J. 07940

One of Switzerland's Rhaetian Railways meter-gage locomotives. An engine of her class has been promised to pull the Swissair Railfan Special for this summer's tour. (Left) Another Rhaetian 2-8-0 is pictured on scenic mountain trackage.

Photograph by Rhaetian Railways

INFORMATION BOOTH

ASK BARBARA: Railroad questions are answered here—as many as space permits. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 East 42nd Street, New York, N. Y. 10017. No questions will be answered by mail or telephone.

1 ***How many people are permitted to occupy a drawing-room on a train?***

If we wanted to be funny, we'd ask how many trains still have drawing-rooms. Seriously, though, we don't know of any limit. At one time 11 members of a family occupied a drawing-room on an overnight run on the Canadian National from Prince Rupert, B.C., to a point in Alberta. A man had reserved the room in advance for himself, his wife, and their 9 children. We wonder how they all bedded down for the night.

2 ***Is it true that Sioux City, Iowa, once had a steam-powered elevated railway?***

Yes, indeed! A line 1.5 miles long, built in 1888, was elevated to avoid the peril of running trains through city streets and to be clear of frequent floods in the lowlands. It extended from Third and Jones streets, Sioux City, to Morningside village and was known in turn as the Sioux City Rapid Transit Co. and the S.C. & Morningside Street Railway.

Built at a cost of $586,000—a lot of money in those days—and laid with 50-pound T-rail and operated with four steam motors, the line was electrified in 1893 and later merged into the Sioux City Traction Co. Then on Feb. 23, 1895, the SCRT was sold under foreclosure to D. H. Robbins of St. Paul, Minn. He reorganized the company as the Sioux City Elevated Railway, with six miles of track and two motor cars, four trailers, and two steam motors. On Oct. 1, 1898, Sioux City Transit Co. was chartered. On the following Feb. 24th Robbins sold it to the Sioux City Elevated Railway.

Originally chartered as the SCRT on March 26, 1888, the road was opened in Sept. '88. It then had one dummy engine, four steam motors, and four trailers. On May 15, 1899, the Sioux City Traction Co. was formed by a merger of the S.C. Transit Co., the Central Traction Co., the Riverside Park Ry., and the S.C. & Leeds Electric Railway.

3 ***Can you tell me anything about a train holdup near Wolcottsville, N.Y., around 1850?***

Yes. It occurred in Buffalo, N.Y., on the horse-drawn Medina & Darien, date uncertain. The robber fled to Akron, N.Y., boarded a train, and got off in the swamps near Wolcottsville. After burying the loot in a sand dune there, he got drunk in a saloon and bragged about the holdup. What happened later is not recorded. The loot has never been found, despite the digging by many treasure hunters.

4 ***Who wrote "The Dying Hobo"?***

We don't know; here are the words:

Beside a Western water tank
One cold December day
Inside an empty box car,
A dying hobo lay.
His partner stood beside him,
With low and drooping head,
Listening to the last words
The luckless floater said.

"I'm going to a better land
Where everything is bright,
Where handouts grow on bushes,
You can sleep out every night,
Where you do not have to work at all,
Or even change your socks,
And little streams of whisky
Come trickling down the rocks.

"Tell my hasher back in Denver
That her face no more I'll view,
Tell her I've jumped a fast freight
And that I'm going through.
Ask her not to weep for me;
No tears her eyes must lurk,
For I am going to a land
Where I'll not have to work.

"Hark! The train is coming!
I must catch it on the fly!
Farewell, partner, I must leave you.
It ain't so hard to die."
The hobo stopped. His head fell back;
He'd sung his last refrain.
His partner swiped his hat and shoes
And jumped the eastbound train.

5 ***When did American women begin working for railroads?***

The Baltimore & Ohio claims that they hired the first female railroad workers in this country, Susan Morningstar and Catherine Shirley, in 1855.

6 ***How would you define "trap car"?***

A railroad car that is loaded with less-than-carload freight.

7 ***History, please, of the Jersey Central's Ashley Planes.***

These planes were completed in 1843, five years after the Pennsylvania Legislature had authorized the Lehigh Coal & Navigation Co. to build them. The purpose was to haul freight cars out of the Wyoming Valley on an additional route for moving anthracite to the Atlantic Seabord via the Lehigh Canal. In 1862 flood destroyed the canal's upper end. Two years later LC&N was authorized to build a railroad to Easton, Pa., to connect it with the Jersey Central. In 1871 CNJ leased that new line, including operation of the Ashley Planes.

Ashley consisted of three inclined planes. They carried both passengers and freight until the building of a 12.47-mile "back track" (the present mainline) in 1867. Thereafter the back track handled passengers and empty freight cars.

Each plane was powered by a 1,200-hp. vertical steam engine located atop each slope. The first plane was 5,000 feet long, the second 3,000, and the third 3,700. The grades ranged from 5.7 to 14.65 percent. Six loaded gondola cars at a time were raised 1,013.75 feet from Ashley to Solomon's Gap with a 2½-inch wire-rope at 12 to 30 miles per hour.

To haul the cars, a "barney" was pulled up the slope, pushing the cars in front of it. While one string of cars was ascending, the barney on the other track was descending. Cars were hoisted at the rate of 35 per hour.

The barney was the most interesting aspect of the Ashley Planes. Each of its four wheels had its own axle, which would slide on a sleeve, making the car adjustable for various track gages. When the barney descended to the foot of the slope, the cars it was to push up were already on the track. To get behind them, the barney descended on gradually narrowing rails into a pit beneath the cars. After moving under and to the rear of the cars, it went out of the pit on gradually widening tracks. When it reached the grade, it passed onto standard-gage track. Then it was pulled against the cars and the whole consist whizzed up the mountain.

In 1948, Jersey Central abandoned the planes and has since routed all traffic via the 12½-mile back track that snakes down the mountain into Ashley. Some remaining sections of the old planes can still be seen from Solomons Gap (Penobscot, Pa.). This history came from Frank T. Reilly, 306 Front St., Dunellen, N.J. 08812, who could supply photos of the planes.

8 ***Where can I find info. and pix on Milwaukee Road electrification?***

An excellent book, *Milwaukee Road Electrification*, by Insley J. Brain, was published in 1961 by Bay Area Electric Railroad Asso. and *The Western Railroader*, P.O. Box 688, San Mateo, Calif. It may be out of print by now. If so,

Because the Erie Lackawanna's steam-servicing facilities were abandoned years ago, an extra tender to supply water was used on this High Iron Co. fantrip last Oct. 11th from New York to Scranton with ex-NKP engine 759.
Photograph by Joseph A. Mannix

you might be able to buy a copy through our *Switch List*. A Milwaukee Road employe, Jim Scribbins, suggests two good photographers as sources for pix: Robert E. Oesterich, 4609 49th Ave., S., Seattle Wash 98118, and Wade Stevenson, 316½ E. Spruce St., Othello, Wash. 99344

9 ***Diesel-powered trains passing our home emit huge dark blue exhaust clouds. This air pollution makes it impossible for us to keep our home clean. What can we do about it?***

Contact your county Health Department, Division of Air Pollution Control. Consult a phone book for the address.

10 ***When were the first railroads built in Japan, China, and Africa?***

Japan's first, built in 1873, ran between Tokyo and Yokohama. China's first was the Woosung line, 1876. Africa's first, 1856, ran between Alexandria and Cairo, Egypt.

11 ***What are "charter lines?"***

We have not heard of this term being used on any road except the Illinois Central. The IC was incorporated in Illinois on Feb. 10, 1851, with authority to build a line northward from Cairo to Dunleith (now East Dubuque) and a so-called branch from Central City (now Centralia) north of Cairo to Chicago. These lines, 705 miles, roughly Y-shaped, have been known from the beginning as "charter lines." They began operation in 1856. Trains have burnished their rails ever since.

12 ***When and where was Centralized Traffic Control first used?***

In 1927 on the New York Central between Berwick and Stanley, Ohio, about 48 miles.

13 ***Please list all of your magazine's* Interesting Railfans.**

Here they are, including next month's personality, Alan Pegler, who recently brought the *Flying Scotsman* to this country. Our list mentions three men who have died since we published sketches of them. Freeman Hubbard, who writes the articles, says he got the idea for this series from the old *American Magazine*, which regularly featured *Interesting People*. Freeman's free-lance writing career began long ago with the sale of one such feature to the *American's* editor, John Siddall. He is rather proud of the fact that the first manuscript he ever sold appeared in a big-circulation monthly.

(71) Harry P. Albrecht, Nov. '68; (12) Edwin P. Alexander, Feb. '63; (39) Cecil J. Allen, March '66, (78) Walter A. Appel, June '69; (54) Fred Arone, June '67.

(69) Howard N. Barr, Sr., Sept. '68; (14) John W. Barriger, June '63; (3) Lucius Beebe, Aug. '61, since deceased; (16) Gerald M. Best, Oct. '63; (49) Col. James G. Bogle, Jan. '67; (27) James A. Brown, March '65.

(29) Paul Carleton, May '65; (52) E. Harper Charlton, April '67; (86) W. Graham Claytor, Jr., Feb. '70; (62) Charles M. Clegg, Jr., Feb '68; (70) Henry B. Comstock. Oct. '68; (31) Warren B. Crater, July '65; (80) Doug Cummings, Aug. '69.

(4) Owen Davies, Oct. '61, since deceased; (34) Everett De Golyer, Oct. '65; (19) Frank P. Donovan, April '64; (21) Arthur D. Dubin, Aug. '64; (15) Donald Duke, Aug. '63.

(72) Michael A. Eagleson, Dec. '68; (26) Bronette Ehrlich, Feb. '65; (75) Jack Emerick, March '69; (11) Rosemary Entringer, Dec. '62.

(73) Jack Fesco, Jan. '69; (6) Charles E. Fisher Feb. '62; (66) Gilbert Foss, June '68.

(37) Paul F. Garde, Jan. '66; (13) Wilbur T. Golson, April '63; (81) Roy D. Graves, Sept. '69; (30) Henry R. Griffiths. June '65; (33) Francis A. Guido, Sept. '65; (32) Adolph Gutohrlein. Aug. '65.

(1) Grahame Hardy, April '61, since deceased; (7) George F. Hart, April '62; (85) Philip R. Hastings, Jan. '70; (67) Anthony Haswell, July '68; (2) Bob Hess, Oct. '64.

(40) Bill Jernstrom, May '66; (43) Hank Johnson, July '66, (74) Clinton Jones, Jr., Feb. '69.

(2) A. C. Kalmbach, June '61; (28) Ward Kimball, April '65; (18) Otto Kuhler, Feb. '64.

(55) Dorothy Laughlin, July '67; (48) Omer Lavallee, Dec. '66; (53) Ruben Levin, May '67; (47) Irene Lewis, Nov. '66; (50) Robert G. Lewis, Feb. '67; (44) Arthur L. Lloyd, Jr., Aug. '66.

(58) Stephen D. Maguire, Oct. '67; (60) William C. Midcap, Dec. '67; (65) Phil Middlebrook, May '68; (84) William D. Middleton, Dec. '69; (56) Bill Moedinger, Aug. '67; (5) Dave Morgan, Dec. '61; (7) Richard J. Murway, Sept. '67.

(76) Ronald V. Nixon, April '69.

(87) Alan Peglar, March '70; (24) Jack Pontin, Dec. '64.

(8) E. J. Quinby, June '62.

(61) Alice Ramsdell, Jan. '68; (59) Sy Reich, Nov. '67; (17) H. Reid, Dec. '63; (20) Bob Richardson, June '64; (68) Herman Rinke, Aug. '68.

(79) Ivan W. Saunders, July '69; (38) Jim Scribbins, Feb. '66; (51) Thomas C. Shedd, March '67;

(82) Merrill O. Skidmore, Oct. '69; (45) Carroll C. Stahl, Sept. '66; (25) Alvin Staufer, Jan. '65; (10) Fred A. Stindt, Oct. '62.
(35) Edison H. Thomas, Nov. '65.
(41) Bill Viekman, May '66; (83) Harold K. Vollrath, Nov. '69.
(77) Arthur W. Weber; May '69; (9) Rogers Whitaker, Aug. '62; (46) Elwood White, Oct. '66; (36) Hal Wilmunder, Dec. '65; (63) Don Wood, '68; (64) Ted G. Wurm, April '68.
(23) William S. Young, Nov. '64.
(42) Ron Ziel, June '66.

"I am looking for a poem or song that links many big railroads together in a rhyme," writes Fred Taylor, 8 Chestnut Ave., East Billerica, Mass. 01821.

"Was a booklet ever written about Washington, D.C., Union Station and Washington Terminal Co.?" asks Henry Diamond, 46 S. Fifth St., Indiana, Pa. 15701. "If so, where can I get a copy? I also want info. and schedules on CB&Q evening *Zephyr* serving the Twin Cities, in the 1940's and the Pennsy's *Trail Blazer* and *Gotham Limited*, same period."

Photograph by Jack Armstrong

Class RS-3 diesel wheeled the daily freight from Pittsfield to N. Adams, Mass., on snowy February 19, 1968.

Who can identify for R. F. Corley, 490 Albertus Ave., Peterborough, Ont., Canada, the original owner of a Brill gas-electric car, built in 1928, serial No. 70061, bought second-hand by Manitoba Hydro Electric Board circa 1956? Does anyone have a record of Brill-built self-propelled cars? Mr. Corley needs the facts for a book he is writing.

"Percentage-wise," asks Ted Fisk, Box 20, North Hoosick, N.Y. 12133, "how much did the steam locomotive contribute to air pollution?"

"Who can tell me how many miles of U.S. railroad tracks were abandoned in the past 20 years and how many miles of new trackage were built and how many new rail routes were created?" queries Frank De Giacomo, 81 Van Cortlandt Park Ave., Yonkers, N.Y. 10701.

Wanted by J. B. Rumsly, P.O. Box 3. East Rutherford N.J. 07070: brief history of the Coudersport & Port Allegany.

"When did the Reading stop passenger service to Wilmington, Dela., and when did the B&O take off their passenger trains to Johnstown, Pa.?" asks John Plesenski, 3233 109th Ave. S.E., Bellevue, Wash. 98004.

Details on final run of New York Central's *Empire State Express* are sought by Father Charles Reinbold, Church of St. Joseph of the Palisades, 6401 Palisade Ave., West New York, N.J. 07093.

Someone asked for info. on Porter locos. "April '60 issue of *Steam Locomotive* magazine was devoted mainly to that subject," writes David Pinto, 1735 Ed. Laurin Blvd., Montreal 9, Que., Canada. "Put out by Starucca Valley Publications, Box 158, Susquehanna, Pa. 1847, it sells for $1; but you'd better query before ordering. That issue may be out of stock."

Wanted by Earl Marvin, P.O. Box 41, Times Sq. Station, New York, N.Y. 10036, the complete poem which begins somewhat like this:

Far out in the West's lonely jungle,
Where the cactus plant grows gaunt and mean
And the mountain wolf stalks lank and lean,
They planted a wornout old boxcar
And a forty-foot semaphore, etc.

"What was the WA&FC and what was its history?" asks Richard Spreen, 143-29 Barclay Ave., Flushing, N.Y. 11355.

Info. on Penn Central's GG-1's is wanted by Howard Turner, 2029 E. Wheatsheaf Lane, Philadelphia, Pa. 19124: serial numbers, date of first service, which ones on passenger runs, how many are in service?

"I read in an old book by Frank Donovan, *Railroads of America* (1949)," writes David Osborne, P.O. Box 186, Fort Churchill, Man., Canada, "that Albany, N.Y., Union Station was one of America's biggest passenger depots, clearing 150 passenger trains daily, besides being the nation's third largest express transfer station and sixth largest mail transfer station. What is its present status?"

"Penn Central is repainting its cabooses," reports Lawson Evans, 22 Montgomery Ave., Shippensburg, Pa. 17257, "but why are they also renumbering them? For example, caboose 478080 is now 19218."

An answer to Lu Cummings' query (Nov. issue) about what happened to two Detroit Terminal open-end-vestibule steel coaches comes from George Cramer, ticket agent on the Wilmington & Western, located on State Highway 141 at Greenbank, Delaware. He writes: "We own those coaches and use them regularly on week-ends each season. Our trains are operated with Canadian National's old No. 92 (2-6-0) built about 59 years ago."

Pvt. E-1 James Bogener, 489-52-8706, Co. B-5-2, 4th Plt., Fort Leonard Wood, Mo. 65473, seeks history of CB&O's Keokuk-Centerville Div.

Although publishers of *The Official Guide* do not keep records showing the greatest number of roads listed at any given time or when the most passenger trains operated in the U.S., some indication may be gathered from the fact that the 1929 *Guides* had the largest number of pages. According to the Association of American Railroads, the year 1929 produced the greatest number of rail passengers, 1,260,000,000. This data comes from James W. Bender, Col., USA (ret.), 5409 Taney Ave., Alexandria, Va. 22304, who is gathering material to write a booklet on the rise and decline of rail passenger service. He says complete sets of the *Guide* from 1878 to the present may be consulted in the New York Public Library and the Library of Congress as well as partial sets elsewhere.

"The average American doesn't realize how swiftly rail passenger service has declined," he adds. "Near my home is a railroad station which less than 15 years ago had a total of 62 regularly scheduled passenger trains passing through in a 24-hour period. Today the number is down to 18."

BLUE CHIP RUN

by William J. Parry

THE STANDARD clock seemed to tick louder, as John Ryerson stood facing the superintendent of motive power in his office at Toronto Union Terminal. The engineer's weather-beaten face looked haggard. His squared jaw and the angry flash of his steel-blue eyes were poor attempts at concealing his uneasiness.

"So you think, Mr. Cameron," he asked, "it wasn't necessary for me to have wired for another engine? You think that since I didn't bring in my train with a disabled engine, I should be barred from mainline service?"

The official's eyes grew frosty. Picking up a letter from his desk, he handed it to the engineer without comment. The general manager's note left no doubt in either mind what he meant to have done.

"Unless prompt inquiry is made to fix the responsibility for the delay to No. 15," it read, "disciplinary action will follow. J.C.D."

"You see how it stands," replied Mr. Cameron. "Unless you can give me a satisfactory explanation, I have no alternative but to pull you off first-class runs."

The hogger sat stiffly in his chair, his eyes focused straight ahead. He seemed waiting for the axe to fall.

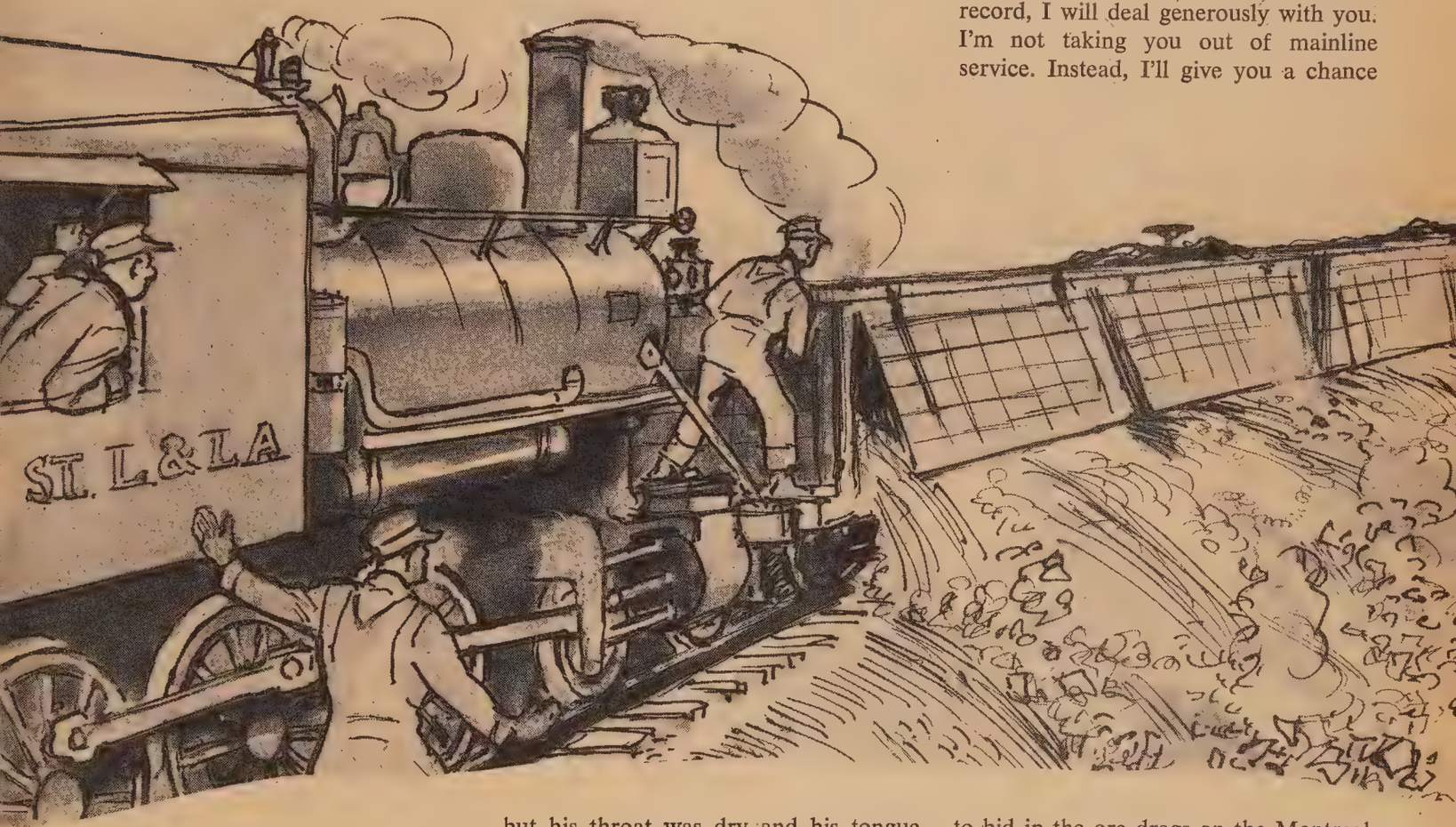
"Speak up, Ryerson!" snapped the super. "Let's have your excuse."

For an instant John's eyes met the official's. He opened his lips to speak, but his throat was dry and his tongue seemed stuck to the roof of his mouth.

"Ryerson," Cameron went on after a long pause, "I'm giving you a last chance to explain why you gave up your engine, delaying No. 15 for more than two hours. According to the road foreman of engines"—he waved toward the man sitting beside him—"you could have made repairs and brought your train in with a delay of only forty minutes."

There was tension in the office as the brass collar spoke, but still his words brought no reply. John Ryerson remained speechless. He would have liked to mention his forty years of experience without one engine failure, but that was a weak alibi. He couldn't really figure out the answer. His judgment had never been wrong before. With a look of disgust, the official turned back to the reports on his desk.

"All right, Ryerson," he said, "you may have a reason for refusing to talk, but when an engineer can't make temporary repairs and causes a serious delay to an important train, to say nothing of criticism from the Transportation Department, it's time to assign him to lesser runs. Considering your good record, I will deal generously with you. I'm not taking you out of mainline service. Instead, I'll give you a chance to bid in the ore drags on the Montreal District."



Mr. Cameron, looking up suddenly from his papers, caught a look of hopeless resignation in the veteran's eyes. When he spoke again, it was slowly.

"If I were you, Ryerson, I'd take the ore runs. The company has a contract with the aluminum plant in Quebec to deliver ore to the mills, which used to come by freighters. We're short of experienced crews at Montreal, and it's a chance for you to make good. That's all!"

The official court rose as one man, scraping back their chairs, relieved that the investigation had ended. En-

gineer Ryerson rose unsteadily to his feet and walked out alone. It had been hard to sit there and have a lifetime of work and planning blown to bits. The worst part was not being able to say a word in his own defense.

A calloused hand fell gently upon his shoulder. John turned to face the tall, broad, road foreman of engines, Mike Brannagan.

"I'm sorry," Mike began, "sorry as hell, but I had to protect my job. I had to tell Cameron why we had to send for another engine. And the GM is sure burning us over the delay to his pet train."

THE TWO men faced each other. Seeing the hurt expression in the runner's eyes, the road foreman kept on a conversation far from what he had had in mind.

"Johnny, you shouldn't have overlooked the importance of stopping your train with the slack in, once you were aware something had gone wrong with the valve motion. It was the nut working off the inside radius bar bolt. That allowed the bolt to back out, foul the horizontal arm of the bell crank, and prevent the reversing gear from going into back motion, which caused all the trouble."

Mike got no rise out of Johnny. The pair stood silent for a moment, each with his own thoughts, while dusk dropped a curtain over the office windows. The road foreman studied his friend, apparently fascinated by the man's power and the suggestion of tragedy in his stooped shoulders.

The hogger turned to Mike as if to speak, but checked himself as the foreman spread out his thick fingers in an expressive gesture.

"You see how it is, Johnny. By stopping with the slack in, you could have cut the engine off from the train, placed her on the bottom forward eighth, put the reverse wheel at fifty percent forward gear, straightened the bent pin with a pipe wrench, and driven it out over the top of the bell crank. The engine would be lame on that side, but you could have brought the train in with only a slight delay. I did the best I could for you, but Cameron had two strikes on you before he called you in."

Engineer Ryerson made no reply. He and the road foreman crossed the corridor to the windows. Silently they stood, their eyes following the movements of the hostler lining up five Santa Fe type freight engines on the eastbound outgoing track. The locomotives were under steam, ordered light for Montreal.

"Those five hogs are the only big power I can beg, borrow or steal for the toughest assignment ever wished upon me," Mike said, "and I'm expected to perform miracles with 'em, besides digging up thirty experienced crews to handle the ore drags.

"What d'ye say, Johnny, can I count on you? You've worked out of Montreal and know the 300 miles of cowpath that the Road Department is ballasting so that I can roll the ore drags over it."

John nodded. "Okay, Mike, put me on your list. I'll take the damned ore drags."

The road foreman smiled.

"I knew you would, Johnny. You'll be in good company. My men are coming from the prairies—hard-bitten railroaders used to the deep-snow country—who can take it in weather down to sixty below."

The two men entered the elevator and descended to track level. With a parting wave of his hand, Brannagan crossed the tracks to the roundhouse.

John wandered in the direction of his home, apparently glancing at the faces of passing pedestrians, but in reality seeing and hearing nothing. Since he had no family surviving, he would sell the old home and start out anew. A week later, with all his earthly belongings stuffed into a grip, he deadheaded to Montreal.

RAIN was falling from a leaden sky when he arrived at the Turcot roundhouse at six p.m. to find Mike Brannagan seated in the locomotive foreman's office, worry creasing his forehead.

"Looks as if I'm stymied, Johnny," Mike said, as the engineer handed his papers to the chief clerk. "I haven't an engine crew available for the night run, and the aluminum mills have only one day's supply of ore on hand. That means drawn fires in the pot rooms—with days, or weeks perhaps, before the mills can get going again. It could even mean loss of our contract."

The office door opened suddenly and the roundhouse foreman barged in to report to Brannagan.

"The 4103 is ready," he said. "Dispatcher wants an order on her as soon as we have an engine crew with their rest up."

Gripping a piece of chalk between thumb and forefinger, the foreman began to write.

Mike Brannagan watched the foreman make up the crew board. The men were booking from eight to twelve hours rest, and the first crew would not be available for six hours. On the face of it, Brannagan was already licked.

The place was quiet, so that the sharp clatter of typewriters in the outer office was heard distinctly.

Mike asked: "Would you accept a call for the night run, Johnny, if I get Tom Dayton to fire for you?"

Engineer Ryerson laughed without humor. "You win, Mike. I'll take the call, but I haven't been over the cowpath for years, and I need all the help you can give me."

"That's a deal. You slide over to the hash house. I'll get the engine ready, as soon as I call Dayton." He grabbed the telephone and dialed the fireman's number.

Two hours later, the 4103, a titan of the rails, backed down upon her train of 60 hoppers, each loaded to capacity with 52 tons of bauxite ore, basic ingredient for aluminum. Mike's glib tongue had worked magic on Dayton, so the fireman had consented to forego his rest to fire the drag.

Jack Peterson, conductor assigned to the run, was a giant of a man, hailing from western Canada. He had spent years railroading through the Rockies. He called attention to the various meet orders as he handed the flimsies to the fireman, while the hogger was testing his brakes.

Head brakeman Joe Toulouse listened as Tommy read each order, checked with the clearance, and then turned them over to the engineer. Finally, he came to the order limiting the speed of Sante Fe engines to 20 miles an hour between Turcot and Souilliere.

John whistled. "What's the idea holding us down to that low speed? Don't they want us to get over the road?"

The brakeman shrugged. "By gar! You do not know? You soon find out. This engine she ees too beeg. The track she ees too light, so we go slow to Souil-li-ere!"

Jack Peterson, chuckling inwardly, headed back to the caboose. He always got a kick out of his French-Canadian brakeman. And Mike Brannagan knew his stuff when he picked the native sons of Quebec for tail-end crews. Those boys really knew the road.

While he strode along toward the tail-end, Jack's alert eyes watched the oilers and car tonks working on the ore-loaded hoppers. Handling a high priority train over a single-track road, originally built for hauling logs to sawmills and now threatening to bog down under the strain of heavy ore trains, was no job for sloppy railroaders.

The genial conductor was aware of his responsibilities. On reaching the caboose, he checked the air gage; then his lantern twirled the high sign. Two short blasts burst from the whistle's throat. The next moment, the hogger shoved the reverse lever into forward gear, raised the booster engine latch, and opened the throttle.

FIVE PAIRS of driving wheels, turning in unison and assisted by the booster, took up the slack. The exhaust boomed from the squat stack and rumbled over the yards.

The stoker elevators began turning slowly with a *clickety clack,* spreading crushed coal over the blazing maw of the huge firebox, as the ore drag began threading its way through the spider web of tracks toward the mainline and the aluminum plants, far to the northeast.

Clearing the yards, the runner eased his big Santa Fe engine along at the 20-mile an hour pace allowed by the restricting order. The chilling rain had turned to sleet. Unforewarned, the ore drag headed into one of the worst storms in Quebec's history. Lashed by a pelting rain, the headlight threw a broken beam ahead on the twin steel lanes.

Flanges groaned and squealed beneath the heavily laden gons. The engine rode on light rails which threatened to buckle under the load.

John's tired eyes followed the flickering headlight beam as it picked up a station mile-board. The ore train was rolling into Souilliere, so he pulled his wandering thoughts back to the job in hand. Fifty of the long, weary miles lay behind him.

At the water tank, the engineer spotted the Santa Fe's big Vanderbilt tender for a long drink. Slipping into his mackinaw, the brakeman clambered down the gangway ladder to inspect the head end of the drag, while the shivering fireman climbed the tank ladder and shoved the spout into the manhole. That done, he came back into the cab to shake down the fire.

Long before the engine crew had completed their chores, the pilot engine had coupled on ahead, ready to assist the drag over the stiff grades which lay ahead.

The confusion and shouting above the drone of pop valves died down. From somewhere back in the gloom, a lantern rose and fell; the pilot engineer whistled off, and two powerful locomotives began lifting the heavy train.

As they cleared the yards and set out into open country, sleet pounded the cab roofs, stinging the face of the engineers as they peered through the open side windows.

John dragged air deep into his lungs. Shaking the sleet from his goggles, he took a fresh grip on the throttle. Black clouds belching from the smokestacks were carried far back by the wind. The deep-toned bark of the exhaust jarred their ear drums; but the doubleheaded drag—engines working to full capacity —forged steadily ahead.

Mile after mile clicked beneath the rolling wheels while the storm increased in fury. Roaring down from the Gulf of St. Lawrence, a gale slashed at the driving wheels as the laboring engines battled their way up the steep grade.

Tom Dayton, his face taut, watched steam and water gages like a hawk. The feedwater pump and stoker were running wide open, with the fireman barely holding the steam pressure in this unrelenting battle with the elements. A mile post loomed up and by.

The hogger moved the booster idling valve into position, warming the cylinders. Instantly, Tom was off his seatbox, anticipating John's next move. Slamming open the dust doors of the vestibule, he reached for the scoop.

As the engineer raised the latch, the powerful machine shuddered as her booster caught the rail, adding its power to the driving force. The steam-gage pointer wobbled uncertainly for a moment, then slowly fell. Now that the engine and booster cylinders were calling for more steam, and wet coal began clogging the stoker elevators, Tom was busier than a one-armed switch tender in a busy terminal.

At times the speed dropped to a crawl. It seemed that, despite all his efforts, the ore drag would stall. But the iron hearts of the locomotives hung on, fighting their way up the long grade to Bordeaux. Topping the hill at last, the doubleheader rolled into the station and stopped at the order board.

The toughest miles lay ahead. Orders were to reduce tonnage and wait for a light engine, sent to assist the drag over the division. The dispatcher knew only too well that even with cutting the load and tripleheading her, it would be touch and go over the heavy grades.

The leading engine cut off and grabbed a tank of water while John Ryerson shoved the cut into the spur. Three hoppers had backed over the switch when the fourth split the snow-filled points. Before John could get his big engine stopped, the hopper's wheels were on the ties, and the storm had the ore drag licked.

WITH the mercury tobogganing downward, working in wind-driven snow became a major problem. Despite the danger of frostbite to fingers and toes, the French-Canadian gandy dancers picked snow from the switch points under the watchful eye of Conductor Peterson until sufficient space had been cleared to allow placing of the rerailers.

Then came a bad moment. The gandy dancers faced the problem of spiking the rerailers to the ties. There just wasn't room to swing a maul under the hopper, and the rerailers must be spiked solid if the derailed trucks were to climb back on the rail, when they made the pull.

Jack took in the situation at a glance. It was up to him to crawl under the hopper and tap the spikes home for he was strong enough to do it. Failure to rerail the car meant calling for the big hook which might cause hours of delay.

It seemed an eternity before the conductor crawled from under the hopper, having achieved the impossible. His overalls were ripped, his face was frozen, and one cheek was bruised by a truss rod. But as he entered the cab his voice had a note of triumph.

"If the luck's in, Johnny," he said, "we'll soon be rolling again. But if it's out, then we're sunk."

The conductor's lantern gave a high-ball. Engineer Ryerson shoved the air reverse lever ahead and felt steam gathering in the cylinders. This was the moment. He opened the throttle warily, notch by notch.

The engine moved ahead slowly, then shuddered to an abrupt stop as the brake valve shot into emergency position in response to Jack's washout signal. Vague uneasiness filled the engineer. Staring backward with eyes slitted against the driven snow, he watched the conductor's broad shoulders disappear beneath the derailed hopper.

Then Jack backed out from under the hopper. The derailed trucks were lined up with the rerailers, and a steady pull would do the trick.

"She's your baby now, Johnny. Pull easy when I give you the signal, and keep going."

Johnny felt tension in him like a raw burn. Sweat gleamed on his face. Tom was gazing fixedly, his features white. When he saw no reaction in Tommy's eyes, he realized that the fireman was gazing at the hands gripping the throt-

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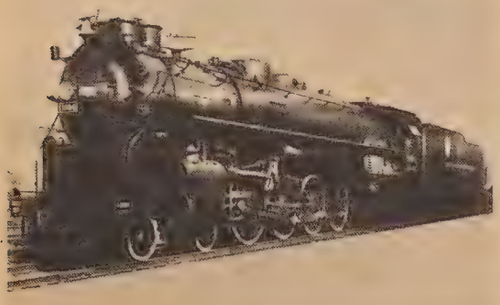

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tle, and those hands were trembling.

With an effort he steadied himself, easing the throttle out gradually. He knocked down the sand lever. The drivers, feeling the grit beneath their fingers, moved the big engine slowly. Drawbars took the strain, the derailed wheels bit into the rerailers, then began to climb upward.

Holding the throttle open in a mighty grip till the muscles of his arm ached, the hogger edged his engine ahead. Had to keep moving slow. Easy does it.

The end of the derailed hopper was rising, at first almost imperceptibly. Then while the eyes of the watchers were trained immovably on the wheels they climbed an inch, two inches. Jack and the gandy dancers stared fixedly. The heavily-laden hopper was up on the rerailers. Suddenly, it wobbled and tilted at a crazy angle. A jerk could send it toppling over.

But the engineer was doing his part. Higher and higher went the hopper, till the derailed trucks were high enough. Another foot, and they would drop into place on the rails, or back on to the ties. Jack's lantern moved more slowly until the movement was scarcely visible. The exhaust died in the stack, and the trucks dropped back on the rails. The lantern swung a stop signal. Tight throats cleared.

GANDY DANCERS withdrew the spikes from the rerailers, then hung them in place on the tender clamps. Arch bars and brake rigging of the hopper were examined and found in running order. Jack strode up into the cab to congratulate the engineer.

"Nice going, John! Take a bow from the dispatcher." The conductor's ruddy features were grim, as he continued. "DS says all train movement is at a standstill, so we own the road from here on in. We'll be tripleheaded out of here. Orders are for you to handle the leading engine."

The engineer stared at the conductor. His broad shoulders were bent with exhaustion, but he smiled. Jack clambered out of the cab and disappeared in the storm.

Flanges ground down on the icy rails as the tripleheader swung out of Bordeaux, propelled by the tremendous driving force of the three giant engines.

Out of the night, a new voice came down on the wind—a sullen, sustained roar that chilled the hearts of the engine crews. Hearing that menacing voice, Engineer Ryerson picked up the drag with all the pent-up power in the boiler of his engine. He talked to her. He cajoled her, and she talked back to him. But even his wariest skill might not be good enough to win out. The chips were down.

The ore drag ran easier now that the journals were warm. The tripleheader was going fine, getting a run at the stiff grade ahead. Halfway up the hill, the exhaust became a rasping croak. John slammed open the cab windows. The exhaust told him plainly that the engine was lifting water, destroying the superheated steam and lubrication!

Failure was written on his features as he closed the throttle and his hog stalled with a despairing grunt. There was no alternative but to back down the grade, blow the dirty water from the boiler, and take another run at it. If he had to fail, at least he'd go down fighting.

John controlled the speed of the drag backing down, because of the danger of a warm wheel cracking in low temperature. His desire to get to the bottom and start again made the descent seem unending.

Finally, with a grinding of brake shoes against wheel treads, the heavy drag jolted to a stop on level track. Then came the muffled roar of steam from the blowoff cocks as the hoggers blew down the boilers. They'd have to be clean to take the beating that they would get on the next run for the hill.

Reaching above his head for the whistle chain, John whistled off.

Sand spurted beneath the drivers while every ounce of power was called upon. With boosters and throttles opened wide, the three engines lifted their heavy burden, gaining speed on the hill. John prayed that this time they would make it.

Rolling at a drunken angle to the curve, the tripleheader swung out, straightened on the tangent, then hit the foot of the grade. The exhaust became a steady roar. Sweat streamed down the fireman's grimy features, giving them a grotesque look, as he helped with the scoop.

With a triumphant ring in her exhaust, the 4103 topped the summit. It was all gravy now over the level stretch to the terminal. As the ore train rolled past the yard-limit board, the night

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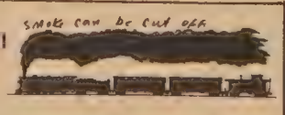

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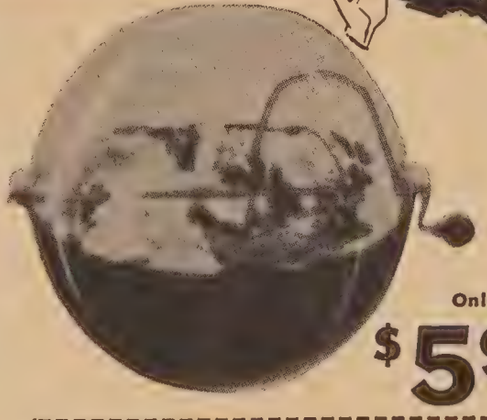

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shift of the aluminum plant opened up the whistles in a salute to the engine crews who had brought her through.

John Ryerson closed the throttle and slumped on his seatbox. Weariness overcame him. The world went dark, spinning dizzily. But strong arms helped him down the gangway.

Then someone gripped his hand so hard that he was forced to shake the weariness from him. John found himself looking directly into Mr. Cameron's eyes, as the brass collar was speaking of blue chip runs and reinstatement to passenger service. ●

STEAM POWER. Mike Eagleson's December feature, "Those Erie Berkshires," drew this comment from William S. Young, editor and publisher of *Railroading* magazine, P.O. Box 88, Starrucca, Pa. 18462: "Naturally, as an old Erie fan, I like that story. It gets in the way of one on the same subject that I've been working on a couple of years, but we'll get around that somehow."

Now listen to James P. Chew, 900 N. 4th St., Jeannette, Pa. 15644: "I enjoyed Bert Pennypacker's article 'Scooping Water on the Fly' (Nov. '69). An addition to his list of track-pan locations was one on the Pennsy's Pittsburgh Division west of DR tower near Derry, Pa. Changing the subject, please keep up Sy Reich's diesel rosters. Their data is hard to get elsewhere. I wish they were reprinted in book form."

"There was also a track pan on the old West Jersey & Seashore (PRSL) just south of Cape May Court House, N.J.," writes H. Gerald MacDonald, 124 E. Wisteria Rd., Wildwood Crest, N.J. 08260. "It was used so trains could make it to Cape May and Wildwood without stopping for water. There were small tenders and heavy trains."

Another man who liked the Pennypacker feature is Mel Robertson, 30 King Street, W., Burford, Ont., Canada, who recalls track pans in Ontario at West Lorne and near Waterford on the New York Central's Canada Southern Division. "There were probably others," Mel adds. "I spent several summer holidays in the 1920's beside one of the beautifully straight sections of that division. My best-remembered thrill was waiting in the dark by the right-of-way to see *The Wolverine* streak past in two sections, usually both doubleheaded. Night after night, just before it came by, I first saw in the sky a pink glare from the opening fireboxes and heard from afar the roar of the approaching engines." ●

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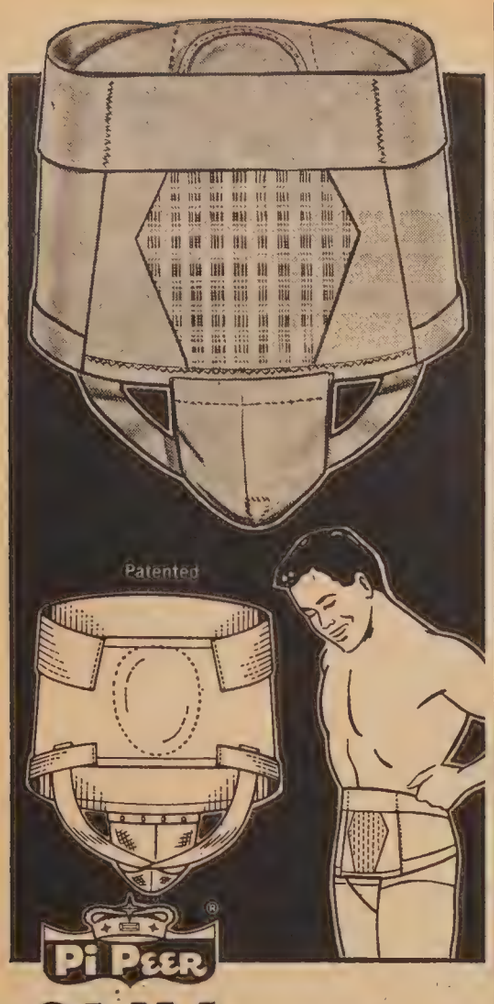

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Rosters of Oregon Shortlines

Compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tractive Effort	Weight	Date	Notes
City of Prineville Railway								
101	660	Alco-GE	S1	B-B	49,750	199,000	1950	
102	660	Alco-GE	S1	B-B	49,750	199,000	1941	1
1001	1000	Alco	HH 1000	B-B	57,500	230,000	1939	2
?	660	Alco-GE	S3	B-B	?	?	1952	11
Condon, Kinzua & Southern Railroad								
104	600	GE	70-ton	B-B	41,280	137,600	1951	
Klamath Northern Railway *(owns one loco, specification unknown to us)*								
Longview, Portland & Northern Railway								
20	1000	Alco-GE	S2	B-B	57,500	230,000	1940	5
80	500	GE	80-ton	B-B	48,000	160,000	1943	
110	1000	Alco-GE	S2	B-B	?	?	1946	
111	1000	Alco-GE	S2	B-B	?	?	1949	
112	1000	Alco-GE	S4	B-B	?	?	1951	
451	300	GE	45-ton	B-B	27,000	90,000	1952	
1001	660	Baldwin	VO 660	B-B	58,860	196,210	1942	3
1002	660	Baldwin	VO 660	B-B	58,860	196,210	1942	4
Mount Hood Railway *(sold to Union Pacific, Oct. 15, 1968)*								
50	660	Alco-GE	S3	B-B	59,000	?	1950	6
51	1000	Alco-GE	S2	B-B	50,000	200,000	1940	7
Oregon & Northwestern Railroad								
1	1600	BLHW	AS616	C-C	106,500	355,000	1953	8
2	1600	BLHW	AS616	C-C	98,760	329,200	1951	9
3	1600	BLHW	AS616	C-C	98,760	329,200	1952	10
101-102	660	Alco-GE	S3	B-B	59,700	199,000	1952	11
Oregon, California & Eastern Railway *(owns no locomotives)*								
Oregon, Pacific & Eastern Railway								
10	660	GE	70-ton	B-B	35,000	140,000	1950	
101	1000	Alco-GE	S2	B-B	?	?	1950	12
1203	1200	GM-EMD	SW1200	B-B	?	?	1954	13
Peninsula Terminal Company								
1	400	GE	44-ton	B-B	22,000	88,000	?	14
3	600	GE	70-ton	B-B	41,300	139,000	1956	15
901	300	GE	50-ton	B-B	27,000	100,600	1943	16
Portland Terminal Railroad *(formerly Northern Pacific Terminal)*								
30-31	660	Alco-GE	S1	B-B	58,200	194,000	1940	17
32-34	660	Alco-GE	S1	B-B	59,700	198,000	1942	18
35-36	1000	Alco-GE	S2	B-B	69,000	230,000	1943	
37	1000	Alco-GE	S2	B-B	69,000	230,000	1943	
38-39	1000	Alco-GE	S2	B-B	69,000	230,000	1949	
40-41	1000	Alco-GE	S2	B-B	69,000	230,000	1950	
42-43	1000	Alco-GE	S4	B-B	69,000	230,000	1952	
44-45	1000	Alco	S4	B-B	69,000	230,000	1954	
46-47	1000	Alco Pr.	T6	B-B	70,000	240,000	1968	18
Portland Traction Company								
100	600	GE-EMD	SW1	B-B	49,500	198,000	1952	
200	600	GM-EMD	SW1	B-B	49,500	198,000	1953	
Port of Tillamook Bay Railroad								
1	?	GE	80-ton	B-B	48,500	160,000	1943	19
2	?	Whitcomb	45-ton	B-B	12,500	90,000	1943	19
Union Railroad of Oregon								
One unit	?	Plymouth	?	B	?	?	?	
Valley & Siletz Railroad								
5,7	600	GE	70-ton	B-B	41,300	140,000	1953	
11	600	GE	70-ton	B-B	41,300	140,000	1954	20
Walla Walla Valley Railway								
770,775	660	Alco	HH 660	B-B	48,440	197,500	1940	21

These rosters are based on data from officials of Portland Terminal, CCT, YW, TMSL, F&P, P of TB, V&S, WWV, and O&N, and are accurate as of third quarter, 1969. For the purpose of our rosters, a shortline is defined as a common carrier listed in either the Official Guide or Pocket List of Railroad Officials, or both, which has a route length less than 400 miles.

Locomotive builders: Alco-GE, American Locomotive Co., General Electric Co.; Alco, American Locomotive Co.; GE, General Electric Co.; BLHW, Baldwin-Lima-Hamilton-Westinghouse; GM-EMD, General Motors-Electro Motive Div.; Alco Pr., Alco Products.

(1) CoP 102 was originally Spokane, Portland & Seattle 10; then CoP 102 (1963).

(2) CoP 1001 was originally Newburgh & South Shore 1; then CoP 1001; then Zeidel Explorations ? (1963). Scrapped in 1965.

(3) LP&N 1001 was originally Basic Magnesium 1000; then LP&N 1001.

(4) LP&N 1002 was originally Chicago & Eastern Illinois 110; then Guy F. Atkinson 110; then LP&N 1002.

(5) LP&N 20 was originally SP&S 20; then LP&N 20 (1966).

(6) Disposition of MH unknown to us.

(7) MH 51 was originally N&SS 1002; then MH 51; then Union Pacific 1251.

(8) O&N 1 was originally BLHW demonstrator; then O&N 1 (1955).

(9) O&N 2 was originally Southern Pacific 5239; then O&N 2.

(10) O&N 3 was originally SP 5274, then O&N 3.

(11) O&N 101-102 were originally Brooks-Scanlon ?; then O&N 101-102. O&N 101 sold to Longview Fibre Co. and renumbered 7001. O&N 102 sold to CoP (9/25/68).

(12) OP&E 101 was originally Hammond Lumber 101; then OP&E 101; then Feather River 101 (lettered OP&E); then Fordyce & Princeton 1.
(13) OP&E 1203 was originally Coos Bay Lumber 1203; then OP&E 1203.
(14) PenT 1 was originally Tacoma Municipal Belt ? (possibly TMB 902 (1st).
(15) PenT 3 was originally Sioux City Terminal 3; then PenT 3.
(16) PenT 901 was originally TMB 901 (1st); then PenT 901.
(17) NPT 30-31 were sold to Yreka Western, renumbered 603-604 (1963).
(18) NPT 34 sold to Central Calif. Traction. renumbered 42 (1965). PTerm 32-33 were traded to Aclo Pr. for PTerm 46-47. PTerm 32-33 were then sold to TMB, renumbered 901-902 (2nd).
(19) PTB 1-2 were originally U.S. Navy 65-00285, 65-00153; then Tillamook County Naval Airport Commission 1-2; then PTB 1-2.
(20) V&S 11 sold to Prescott & Northwestern, renumbered 24.
(21) WWV 770, 775 were originally Northern Pacific 126-126; then WWV 770, 775 (1950). ●

Boxcar Depot in the Wilderness

BRASS POUNDER. "At the time I relinquished my life's profession as a telegrapher in 1953," writes George J. Gale, 2527 Buker St., Olympia, Wash. 98501, "there were about 200,000 Morse operators working for stockbrokers and Western Union. Now, with automation, the breed is extinct except for a few still on the railroads.

"He was a great man, the oldtime brass pounder. In a language all his own he communicated with fellow practitioners of the art all across this continent. About one in ten was a boomer, seldom staying in a town longer than was required to stake himself for a move to the next. He traveled with a *bug*—a Vibroplex to make his dots and dashes if his arm was affected by daily use (the same as chronic writer's cramp). But otherwise he carried no luggage, only the clothes on his back, yet work always was waiting."

George recalls the long-gone time when he was pounding brass on the Hudson Bay Railroad. He rode a mixed train up from The Pas, Man., to a place (then called Leaky Canoe) where he was to open the telegraph office for construction and for the fall wheat rush.

"At one point," he goes on, "a Cree Indian got off the train, which was called the *Muskeg Special*. He had a canoe and three sled dogs and a rifle. Further along the line we were stopped for 45 minutes by a large herd of caribou crossing the track. About one a.m. I arrived at my job. Our depot was a boxcar, still on wheels and rails but banked well with cinders and snow. The telegraph office was located at one end, the kitchen at the other end, and a bunk room in the middle

"The trainmen helped me to light a couple of coal-oil lamps and build a fire in the coalburning stove. I opened the station by OSing on the Morse line the mixed train in and out. Just before unpacking my gear, I noticed that someone had recently been living in the car. There were dirty dishes, bacon, flour, sugar, salt, pepper, half a jug of cheap whiskey, and some clothing. I set those groceries aside. Later on, as my own grub got short, I began delving into them.

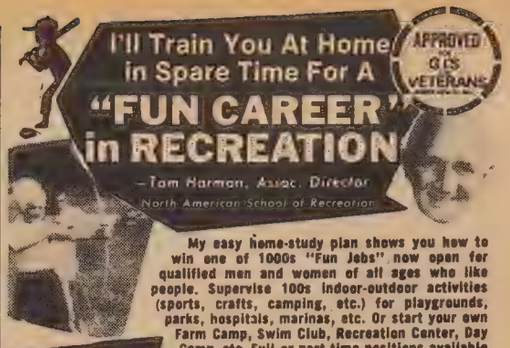
"Meanwhile, on my first night, I heard some peculiar noises underneath the car. Upon investigating, I saw two gleaming eyes—some kind of wild animal! It may have been a bear, for one morning I saw bear tracks leaving from under the depot. At a later date, conductor Hoisington brought me a double-barreled shotgun and I began hunting ducks on the Nelson River. Some ducks I ate. Others I hung out on the clothes line for the train crews to pick up when they stopped at the depot while I was away.

"Rooting around the place, I was surprised to find an oilcloth bag containing a Colt 41 six-shooter, several pieces of newly-mined silver, seven American silver dollars, and a mold that obviously had been used for counterfeiting. I sent the mold and the silver dollars to the Mounties at The Pas, but kept everything else. I learned that a character known as "Seldom See Sam" had worked the job the year before. After it closed for the season, he continued to live in the boxcar, but was shot and killed in a card game at Churchill.

"Leaky Canoe was quite busy that summer and fall with the wheat rush and gandy dancers repairing the track. In early autumn Hudson Bay had two or three weeks of open navigation, which enabled us to ship the Manitoba and Saskatchewan wheat to Europe before the ice closed in. That fall a train crew brought me a rifle, with which I shot two moose and five caribou, dividing the meat with the crew.

"I ran a sort of free eating-house. The crews would bring up vegetables from the farming country far to the south. Combining them with the wild meat, I became quite a cook, my specialty being bull-ya, or northern bush stew. The crews ate heartily of this wholesome grub.

"With the close of the navigation season, I was sent to Sioux Lookout, Ont., from which wheat moved to the Great Lakes. I worked in another boxcar depot at Quorn, Ont., where the Petri River flowed past my back door. No, I didn't find any treasures at Quorn. Just before Christmas I was laid off, with no further jobs in sight; so I headed for Texas and worked out the winter on the Cotton Belt." ●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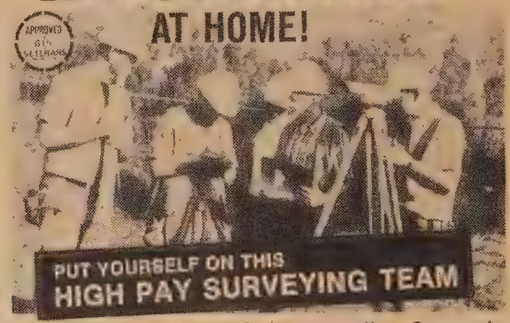

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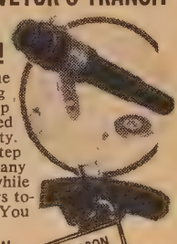

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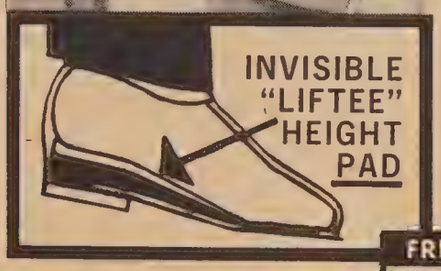

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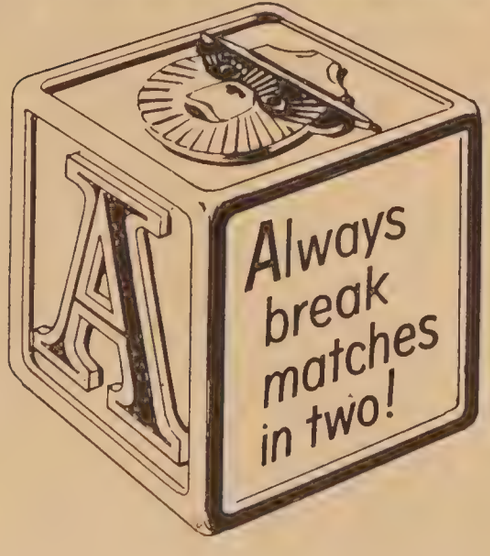

BOOKS OF THE RAILS

CAB-FORWARD, by Dr. Robert J. Church, 216 pages, plus 6 fold out plans of locomotives, maps, charts, hundreds of photos, other illustrations, hard covers, fine printing on quality stock 8½x11½. Kratville Publications, 2566 Farnam St., Omaha, Neb. 68131; $16.50.

The most fully researched and best executed book we've seen on a single locomotive design, this excellent coverage goes into every hand-iron detail of why, how, and by whom the famous Southern Pacific cab-ahead steamers came into being. The terrain of the Sierra Mountains caused some unique locomotive variation. Dr. Church takes you through the earliest developments of this design, plus, maintenance problems, crew fears, operations, even a table giving each engines retirement date. Photographically the book holds together as an excellent job, with good layout, make-up, and picture choice.

THOSE DAYLIGHT 4-8-4's, by Dr. Robert J. Church, 120 pages, plus 2 foldout locomotive plans, 8½x11½, charts, illustrations, and several hundred photos, hard covers, fine printing on quality stock. Kratville Publications; $7.50.

Here is the matching companion to the cab-forward book, same author. The Daylights were probably the most colorful streamlined steam engines ever built, and their hues adorn the outside covers of this book. The GS class locos are covered from the viewpoint of construction, design, operation, and performance. Comparison of these fine engines with other notable 4-8-4's brings out the fact that they ran as well as they looked.

FOCUS: The Railroad in Transition 1947-1967, by Robert S. Carper, 9x12, 260 pages, indexed, well illustrated, hard covers, printed on good paper, reproduction fair to good, A.S. Barnes & Co., P.O. Box 421, Cranbury, N.J. 08512; $15.

A photographic essay of the changes in American railroads from steam to diesel and electric locomotives, the demise of the passenger train, and the inception of modern technical advances which have improved service. The "new look" in today's freight train is an interesting study of cars built for present, however, and merely photographically brings back our memories of steam and passenger service following World II. Some interesting and daring make-up is featured, although we don't always agree on the photo selection or cropping. The text is well written and imaginative.

BESSEMER & LAKE ERIE RAILROAD, 1869-1969, by Roy C. Beaver, 184 pages, 8½x11½, hard covers, printed on

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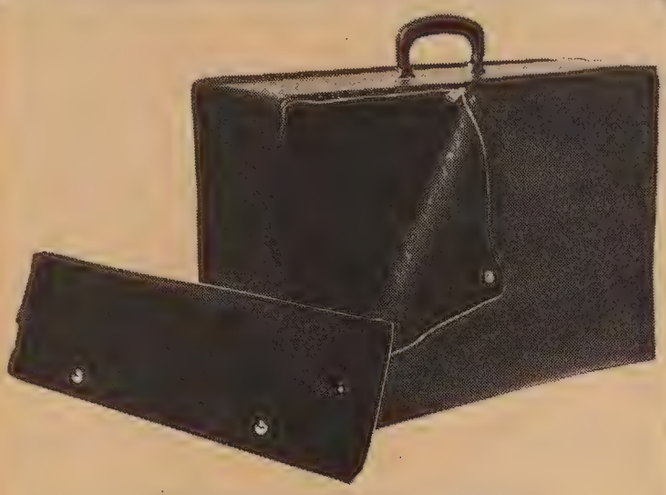

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1869 TRAVELERS' OFFICIAL RAILWAY GUIDE, reprint, 5x6½, soft cover- over 300 pages, maps and timetables of the forerunner of today's official Railway Guide. National Railway Publication Co., 438 W. 33 St., New York, N.Y., 10001; $5.

An exact reprint of the June 1869 guide, complete with maps and passenger schedules, showing station names and mileage. Very good for tracing old railroad lines.

NORTH ARKANSAS LINE, by James R. Fair, Jr., 304 pages, hard covers, 6¼x9½, well illustrated with maps, charts and photos, printed on non-coated stock with fair to good reproduction, timetables, index, rosters, drawing, Howell-North Books, 1050 Parker St., Berkeley, Calif., 94710; $7.50.

The complete history of the Missouri & Arkansas Railway during the 82 years it served the depressed Ozarks. This remote road is not very well known among traveling railfans, but its history parallels the troubles of many other routes. Motive power and rolling stock are covered in depth. This was a most photogenic and picturesque line with management sometimes able, sometimes too conservative. The book is filled with stories, laughs, and tears.

MODEL RAILWAY ENGINES, by Jonathan E. Minns, 8x8½, hard covers, good printing on color stock with color plates, glossary, 120 pages, well illustrated with photos and drawings. G.P. Putnam's Sons, 200 Madison Ave., New York, N.Y., 10016; $5.95.

Minns covers the history and, early developments of model locos, particularly live steamers. Examples from Britain, America, Europe, and the Far East are shown in this careful study of the best examples and craftsmanship of detail of working live steamers.

BULLETIN No. 1, Oct. '69, The Railway & Locomotive Historical Society, edited by Charles E. Fisher, 6x9, soft covers, 73 pages, illustrated with drawings, maps, photos, and timetables, R&LHS, Baker Library, Harvard Business School, Boston, Mass., 02163; members $2, non-members $3.

Featuring a comprehensive study in depth of the history, operations, and motive power of the Milwaukee & Northern. Also depicting the Milwaukee, Lake Shore & Western with the same type of thoroughness.

CINDERS & TIMBER, by Frederick G. Harrison, 11x8¼, soft covers, 50 pages, photos, timetables, rosters, ticket reproductions and maps. Cinders & Timber, 801 Cloquet Ave., Cloquet, Minn. 55720; $3.75.

Photo album covers the history of the Duluth & Northeastern in Minnesota. Many rare old-time photos were dug up to add interest. Picture reproduction and page make-up could have been much better, but we are glad that someone finally did a book on this small but fascinating line.

Photo by Norton D. Clark

MBTA car 5159 at Riverside station.

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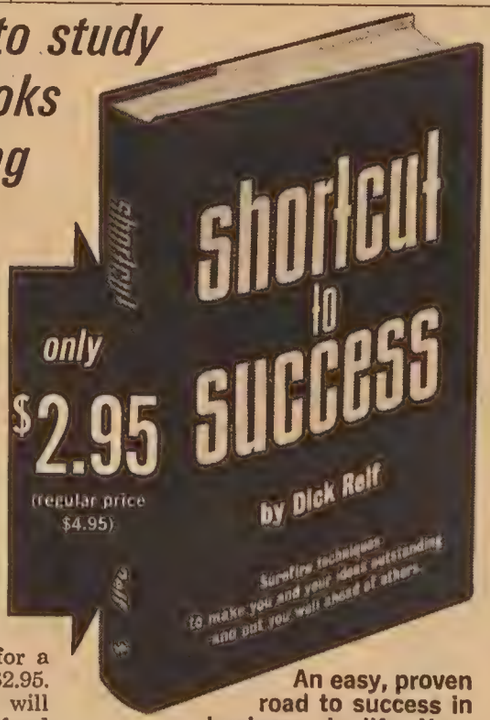

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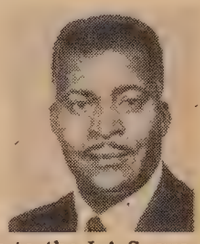

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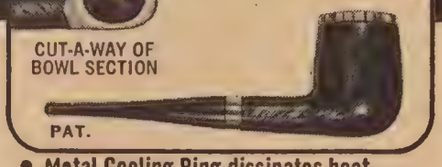

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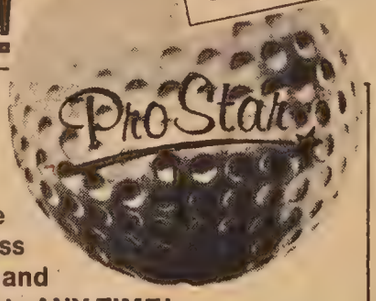

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CECIL CHURCH, 216 Rideau Terr., Ottawa 2, Ont., Canada, buys or trades orig. Alco, Baldwin, Lima, Climax, Heisler bldrs. steam pix, catalogs.

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VINCENT DE SANTIS, 196 Carbon St., Paterson, N.J. 07522, sells EL color pix and slides.

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H. EVERHART, 1214 Warrington Pl., Alexandria, Va. 22307, sells back issues CERA Bulls., traction bks.

ED FULCOMER, Box 1004, Canon City, Colo. 81212, buys, sells, trades diesel slides, negs., UP, D&RGW, AT&SF, MP, CRI&P, NP, GN, SP&S, WP.

BILL GORDON, 811 Garson Ave., Rochester, N.Y. 14609, sells his bk., "Fonda, Johnstown & Gloversville, 1870-1970."

GARY GRAHL, 1452 Leland Ave., Bronx, N.Y. 10460, sells 3½x5 color pix PTC, PSTC, TTC, SHRT, NOPS, LAMTA, SFMR, MBTA, TARS, EL, PRR, NYC, etc. Lists free; specify subject.

BOB GREENAWALT, 3643 N. Rosemead Blvd., Rosemead, Calif. 91770, trades Poor's manuals for r.r. stocks, bonds.

G.C. HENDRICKS, 345 Lincoln Ave., Brooklyn, N.Y. 11208, will trade two 65-yr.-old NY subway whistles for brass steam loco whistle.

CHAS. HESELTINE, 445 Preble St., S. Portland, Maine 04106, sells Maine steam, trolley pix. Free lists.

LARRY KELLER, 2741 Thornbridge Rd., York, Pa. 17404, sells dupl. slides and pix 7 PRR steam engines at Strasburg.

CLIFF KIERSTEAD, 1771 Dougherty Ferry Rd., Kirkwood, Mo. 63122, trades rr. playing cards, ash trays, glasses, china, silverware, tts., etc. esp. MP, SLSF, WAB. (SSE)

JIM KINGMAN, 2806 Paloma St., Pasadena, Calif. 91107, will trade 1/42-12/44 Trains for Interurbans Spls. No. 15 or earlier or CERA Bull. 95.

DAN KNOWLES, Box 249, Drexel Hill, Pa. 19026, will sell Red Arrow's Progress Mag. 1916-'43.

WARREN LEE, 1016 Vista Grande N.W., Albuquerque, N.M., buys pre-'65 back issues Railroad Magazine, Trains; also emp. tts. of CNJ, LV, L&NE, L&HR, DL&W, RDG.

FRANK LUPPINO, Jr., 1445 Sunset Ridge Rd., Glenview, Ill. 60025, buys marker brackets, kerosene switchman's lanterns.

MIKE MAZZACANO, 3739 Landfair Rd., Pasadena, Calif. 91107, buys or sells negs., pix. Trades diesel negs.

J.P. McGUAN, 8131 S. Maplewood, Chicago, Ill. 60652, sells rr. bks., tts., travel catalogs, etc. (SSE)

BETH McKINSEY, 15 Wendell St., Cambridge, Mass. 02138, asks where she can buy 'Dispatcher," a board game dealing with trains.

M.E. MEYER, 552 Saunders Ave., Akron, Ohio 44319, sells railroadiana. Sends 25 free tr. orders for large SSE.

TOM MICHELS, 3894 N. 41 St., Milwaukee, Wis. 53216, will buy illuminated train drumhead sign.

AL MILLER, 3212 34 Ave. S., Minneapolis, Minn. 55406, buys back issues Railroad Magazine.

STEWART MITCHELL, 1072 Cumberland St., St. Paul, Minn. 55117, buys Off. Guides, CMSP tts., emp. tts. all of '84-'10.

L.D. MOORE, Box 2144, Portsmouth, Va. 23702, sells railroadiana; list 20¢.

WILSON MOUL, Marlatt Hall, Kansas State Univ., Manhattan, Kan. 66502, buys SP tts., emp. tts. of 1920-'50, tickets, tkt. validating dies.

J.E. MURPHY, 733 Beaverbrook, Baltimore, Md. 21212, buys pix and plans Kanawa & Mich. 4-wheel caboose 71, wooden gons 4461-5832.

JON NELSON, 9911 W. Broadview Dr., Miami Beach, Fla. 33154, buys anything marked FEC. Buys RPO cancellations. Trades FEC tkts.

JOHN NOY, Box 282, Gibsonton, Fla. 33534, will sell pre-1920 GT switch key.

STEVE ONDIC, 11928 127 St., Edmonton 41, Alta., Canada, buys N&W, LIRR rulebks. of '35, Intl. Lib. of Tech. RR. Bks.

JOHN PARKER, 1439 Alpine Dr., Aiken, S.C. 29801, sells rr.pix. List 25¢. Sells traction pix. List 15¢. Sells, trades 2¼x3¼ negs. on approval.

JIM PATY, 115 Oak St., Ashland City, Tenn. 37015, buys pix Tenn. Cent.

ED PFERSCLOFF, 444 Winter St., Manitou Springs, Colo. 80829, will buy dining car chimes.

JIM PROKES, 7850 S. Kenneth, Chicago, Ill. 60652, buys CERA bulls., tts., cap badges.

TONY REZNAK, Jr., 120 Edison St., Wilkes-Barre, Pa. 18702, sells custom-made D&H photo albums. (SSE).

LEW RICHARDSON, Box 265, Northfield, Ohio 44067, will sell psgr. car switchboard mfg. by Safety Car Heating & Ltg. '27.

DAN SABIN, Box 203, Manly, Ia. 50456, buys pix, other railroadiana, CRI&P, CGW, M&SL, CB&Q, NP.

WAYNE SCHENK, Box 195, W. Seneca, N.Y. 14224, sells p.c. size pix TH&B, WA&G, A&A, G&W stations. List, sample 20¢.

RANDY SCHOLL, Box 123, Batavia, Ohio 45103, wants current info. on steam situation in S. Amer., esp. locations of roundhouses and shops.

TOM SCHUTTE, 2830 Windover Rd., Murraysville, Pa. 15668, will sell Trains 12/49-12/58 complete, Mdl. RRer 1/48-12/58 incomplete.

M. SELIGMAN, 4736 Elizabeth Pl., Cincinnati, Ohio 45242, buys pix, drawings SLSW steam, esp. 800-819, cabooses, psgr. cars, stations.

ERNEST SEVDE, 110 W. State St., Toledo, Iowa 52342, sells railroadiana, bks., negs., etc. (SSE).

A.R. SHADE, 9831 Aldridge Dr., Columbia Sta., Ohio 44028, sells, trades pix b&w slides MBTA. List, sample 25¢.

JOE SHAFFER, Jr., 128 W. Albemarle Ave., Lansdowne, Pa. 19050, buys rosters N&W, B&O, C&O, WM, B&LE, EL, D&H, LIRR, NYC MU's.

AL SHARP, 100 Shennecossett Pkwy., Groton, Conn. 06340, sells rr. maps 1870-1960; trolley guides, tts.; NH, NYC, PRR tts., emp. tts.; lists 25¢. Buys BAR, Canadian tts., esp. Newfoundland Rys.

H.B. SMITH, Box 452, Birmingham, Mich. 48012, buys amateur or professional rail movies.

KEN SPRINGIRTH, 4720 Cliff Dr., Erie, Pa. 16511, sells "Trolleys of the Gem City," covering Erie system.

FRED STECK, R1, Reese, Mich. 48757, sells C&CL stock.

GUY STONE, Box 236, Glenwood, Ga. 30428, compiling bk. of copies of historical documents, pix on evolution of transp.

R. STUHR, 87 Sherburn Dr., Hamburg, N.Y. 14075, buys Erie, EL, DL&W, B&O oil hand lanterns, good cond.

TED TAETSCH, 14218 Garfield Ave., Lakewood, Ohio 44107, has over 4,000 traction negs. to loan. List free.

A.D. TASKER, 303 Cross St., Winchester, Mass. 01890, trades electronic equip. for trolleyana, railroadiana.

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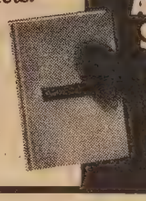

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T. TRENCANSKY, 116 N. Baldwin St., Johnson City, N.Y. 13790, trades LV, D&H, PC, EL slides, negs. for those of other rrs., esp. FM, Baldwin diesels.

GLENN WIGREN, RD 2 Box 199, Jamestown, N.Y. 14701, will sell 2 Amer. Exp., 1 Wells Fargo Exp. rcpts.

JACK WILSON, 645 Melrose Ave., Plainwell, Mich. 49080, sells b&w, color pix midwest rrs. List 15¢. Will buy PRR sw. key.

RON WILSON, 619 E. Ave. A, Hutchinson, Kan. 67501, buys CB&Q, FW&D, C&S, SLSF, MV, AT&SF lanterns, sw. keys, locks.

JIM WOODFIELD, 607 10 N.E., Springhill, La. 71075, buys color slides of diesel-powered passenger trains in 1950's.

HOWARD WORLEY, 713 Lafferty Dr., Pittsburgh, Pa. 15227, sells P&WV, WSB loco diagram bks.

JOHN YATES, 125 E. Oakland Ave., Oaklyn, N.J. 08107, sells railroadiana. List SEE.

DEAN ARNOLD, 1620 Creal Crescent, Ann Arbor, Mich. 48103, wants emp. tts of AA, PC, NYC, GTW west of Detroit, anything NYO&W. Sells, trades LV forms, pix.

MORRIS ABBOTT, 33 Driftwood La., Milford, Ct. 06460, wants old Conn. rr. stock certificates.

WARREN BOHLMAN, 3811 N. Pacific, Chicago, Ill. 60634, buys pix of SLJ&S, SLA&S, CP&SL, CS&SL.

FRED CAIN, 6261 Rose Circle Dr., Scottsdale, Ariz. 85251, buys pix, info. and tts. New Haven elect. lines.

JIM DAVIES, 78 Warren Pl., Ridgewood, N.J. 07450, sells pix of GN, NP, Milw, shortlines, other railroadiana. (SSE)

LYLE EVERSON, Box 108, Viroqua, Wis., 54665, will sell Railroad Magazines 1947 to date.

Ex-NP caboose 1242 is now dining room beside Zeke's Drive Inn on U.S. Highway 2 (Stevens Pass), a short distance east of Startup, Washington.

Walt Thayer, ex-GN section man,
Box 75, Wenatchee, Wash.

ROBT. GERSTLEY, 153 Pleasant St., South Weymouth, Mass. 02190, sells Off. Guides 1960-68. (SSE)

DAVID HAMLEY, 121 LaCrosse St., Pittsburgh, Pa. 15218, offers $100 for builder's plate off Northampton & Bath diesel 1601, scrapped at Modena, Pa., between '51-55.

MIKE EAGLESON, Edgemere Ave., Mt. Arlington, N.J. 07856, sells 4x5 German steam negs., others; rare Beebe books; large list of railroadiana.

WM. KRUEGER, 2018 Leo St., Dayton, Ohio 45404, buys pix or slides, any trolley or interurban line, steam or diesel locos.

ELLIOTT KAHN, 58 Verbena St., Clearwater Beach, Fla. 33515, sells size 616 negs. of locos and cabooses, taken within last 15 yrs. (SSE)

LARRY KELLER, 2741 Thornbridge Rd., York, Pa. 17404, sells dupl. slides. Makes orig. slides to order, plus 8mm movies. (SSE)

TOM MULLAHEY, 933 E. Centre St., Mahoney City, Pa. 17948, will sell rare, original 1857 Bradshaws Railway Guide, intact, for best offer.

J.E. MURPHY, 733 Beaverbrook, Baltimore, Md. 21212, wants pix, plans of Toledo & Ohio Central wooden gons 17608-18855, plus Ma & Pa stock cars.

T.G. GASCIOQUE, BOX 565, Oshawa, Ont., membership chairman NATTA, sends Trolley Coach News to members.

FELIX REIFSCHNEIDER, Box 88, Fairton, N.J. 08320, sells "Interurban Limited" booklet, (75 Ohio pix), for $1 ppd.

WAYNE REEDY, 1228 Congress St., Middleton, Ind. 47356, wants bids on railroadiana for sale, (SSE), playing cards, postcards, diner items, buttons, ash trays, etc.

R.L. REEDY, 2042 N. Taylor St., Arlington, Va. 22207, wants RF&P, Sou., switch keys, emp. tts, train sheets, train orders, cap badges; trades also.

WAYNE REINFIELD, 1011 Neilson St., Far Rockaway, N.Y. 11691, buys lanterns, markers, classification and hand, globes with rr markings, bells, headlights, etc.

DENNIS SCHMIDT, 907 N. Court, Alma, Mich. 48801, sells 3½x5 diesel pix, many roads, list 10¢.

WARREN STOWMAN, buys and trades for pix of WM 2-6-0 and 4-6-0 types.

PHIL SIMMS, RD1, Montgomery, N.Y. 12549, buys two color lanterns, globes, and parts.

WAYNE SCOTT, 2026 S. Dakota Ave., Sioux Falls, S.D. 57105, sells Railroad Magazine, Trains, model magazines, 1925 Loco. Cyclo, other books. (SSE)

JOHN THOMPSON, 1571 Mt. Pleasant Rd., Toronto 12, Ont., Canada, trades original slides of U.S. and Canada pass. trains, equipment.

Sgt. DENNIS WOZNICZKA, Box C-8896, AFB, Denver, Colo. 80230, wants info. and pix on Monon wreck in Monon, Ind. Sept. 17, 1961.

Pen Pals Wanted

Leslie E. Hewitt (54), 23 Lydford, Royal College St., London NW1, England, British Railways employe, interested in railroads and travel.

E.L. Reedy, 2042 N. Taylor St., Arlington, Va., wants to hear from RF&P and Southern fans and active or retired employes, also railroaders everywhere.

(Mr.) Starling Harrison (47), 4511 Cecelia St., Cudahy, Calif. 90201, Space 10, wants mail from railfans. Also trades matchbox cars.

Donna Loakkanan (19), Orr, Minn. 55771, lost one hand recently in industrial accident, would appreciate cheer-up letters and cards.

Margaret Doucette (19), Box 54, Stockholm, Maine 04783.

Mrs. Naudyne Holman (55), 765 E. 14th South, Orem, Utah.

Mrs. Judy Voisine (18), Box 125, Station St., Stockholm, Maine 04783.

Carol Searles (22), Box 5, Station St., Stockholm, Maine 04783.

Susan Harrison (16), 117 May Ave., Collins Park, New Castle, Del. 19720.

Debbie Trent (14), Fayette Drive, Knoxville, Tenn. 37914.

Steve Hernandez (15), Box 418, Woodsboro, Texas 78393.

Ruben Silvas (14), Box 75, Woodsboro, Texas 78393.

Edna Sawyer (66), 812 S. Morgan St., Brazil, Ind. 47834.

Tom Moran (18), Box 242, Wilkes-Barre, Pa. 18703.

Mary Jo Rayboss (18), 554 19th Ave. South, Clinton, Iowa.

Pam Barnhill (17), Rte. 1, Melber, Ky. 42069.

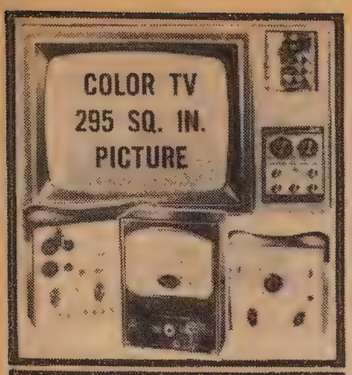
PFC Gilbert C. Fanning, 322-38-1795, HSB 5/16th Artillery, APO, San Francisco 96262.

George W. Chinnery (68), 230 Marlboro St., Brantford, Ont., Canada.

Mrs. Clara Kirchen (49), 540 Wiley St., Fort William, Ont., Canada.

Kathryn Majefski (17), 414 Reifert St., Runge, Texas 78151.

Miss Pauline Citino, 5311 Bow Ave., Cleveland, Ohio, invalid, needs cheer-up letters and cards.



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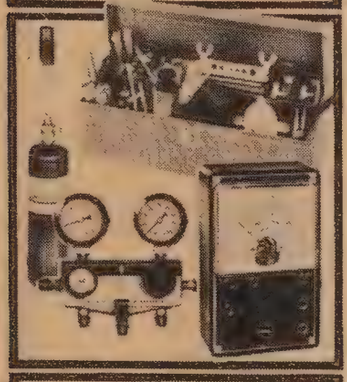

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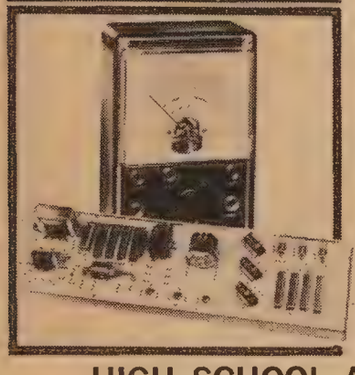

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• ABOUT THE AUTHOR •

Elmer Wheeler, known as "Mr. Sizzle" to millions of salesmen around the world, is always in great demand for speaking engagements. Early in his career Elmer took as his motto "Don't sell the steak—sell the sizzle," and turned it into an imposing business philosophy with a string of successes to prove it.

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PERSONALITIES. Mary Armstrong, 21, was the first woman employed on a Santa Fe Railway welding gang. The beribboned, jeans-clad miss spent last summer as timekeeper for the 21 men who weld steel rails into 1,440-foot lengths for installation in the division for which Winslow, Ariz., is headquarters. Since September she has been majoring in business at the University of Arizona.

Joseph Kahn, chairman of the board of Seatrain Lines, Inc., has been named "Man of the Year" by the Anti-Defamation League Appeal's Maritime Division. A native of Russia, he came to the U.S. at age 13, later entered the shipping industry here, and in 1965, with his associates, acquired control of Seatrain Lines.

A former "king of the hoboes" suffered severe leg injuries along the Chicago & North Western tracks the other day and was hospitalized in Marshalltown, Iowa. The man is "Hard Rock Kid," or John Mislen, 60. He was crowned hobo king in Britt, Iowa, in 1967 and 1968 at the annual National Hobo Convention.

Remember the great British train robbery of Aug. 8, 1963, when a gang held up a mail train near London and got away with the equivalent of $7 million? Only a small part of the loot has been recovered. Later, nearly all of the bandits were arrested. One of them, Ronald Biggs, 39, was sentenced to 30 years in prison but made a spectacular escape in 1965, along with Eric Flower, also a member of the gang. Those two were traced to Australia. Recently, police surrounded the Biggs home in a suburb of Melbourne and arrested his redheaded young wife, but Biggs himself apparently slipped through the net. A hunt is on.

Additional Roster Notes

Fresh data comes from Geo. R. Silcott for Reading roster (Nov. '69). Note 14 should read, 523 was sold to George R. Silcott, then to St. Johnsbury & Lemoille County, renumbered 202 (1968). Two new notes, 15 and 16, should be added as follows: (15) 467 sold to Silcott, then to Peabody Coal Co. (16) 504, 520 and 521 sold to Silcott, then to R.B. Hornberger Co., then to San Manuel Arizona.

U.S. Steel has sent us new data for Ohio Shortlines rosters (Dec. '69). Note 34 should read: LT 1001-1002 sold to Northampton & Bath, renumbered 1001-1002 (1954). LT 1003-1004 sold to Union, renumbered 561-562 (1962, 1964). LT 1005-1008 sold to U.S. Steel (1968, 1963, 1963, 1965). LT 1008 renumbered USS 82 (Gary). LT 1005, 1007 renumbered USS 22, 17 (Homestead). Note 12 should read: B&LE 282 sold to Columbia-Geneva Steel Div. of U.S. Steel, renumbered 38.—Sy Reich

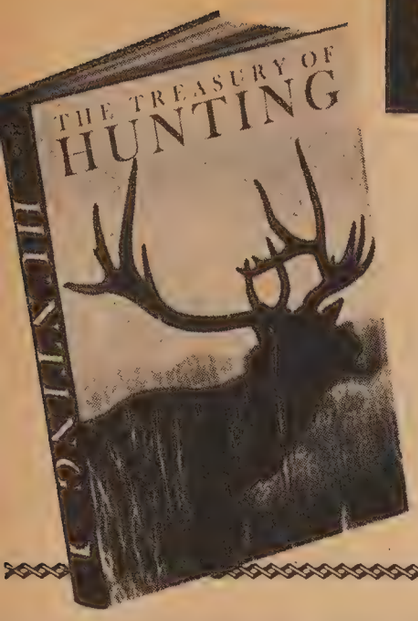
Model Trading Post

L.D. MOORE, Box 2144, Portsmouth, Va. 23702, sells Lionel, AF wide gage, O gage trains. List 15¢.

C. BALLARD, Box 3, Poestenkill, N.Y. 12140, wants roof for Lionel Std.-gage 18 Pullman.

ALDEN MILLER, 3212-34th Ave., S, Minneapolis, Minn. 55406, wants Erector sets; toy train metal accessories.

BOOK SALE!



Fascinating books, on all subjects, from presses and publishers all over the world are being offered in this spectacular book sale at truly amazing savings. These great bargains can provide you, your family and friends with hours of fun, information and diversion. Many of these fine books are profusely illustrated, luxuriously bound and true collector's items.

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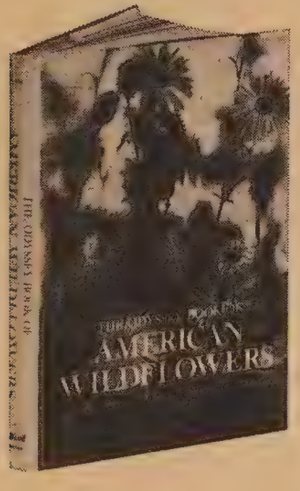

8797. LAROUSSE ENCYCLOPEDIA OF THE EARTH. Foreword by Sir Vivian Fuchs. Intro. by Carroll L. Fenton. More than 500 Photos & Diagrams, mostly in color. Comprehensive, authoritative account of the anatomy and history of our planet, the geology, mineralogy, palaeontology—answers almost every question. Pub. at $17.50 **Only $9.95**

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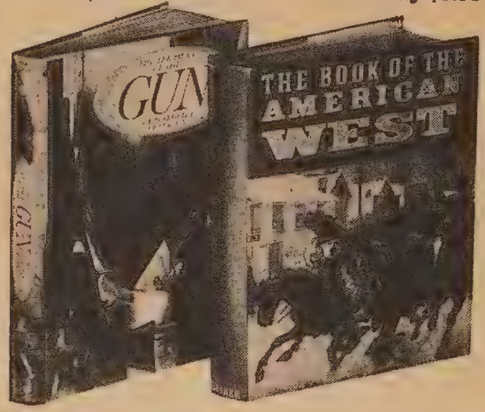

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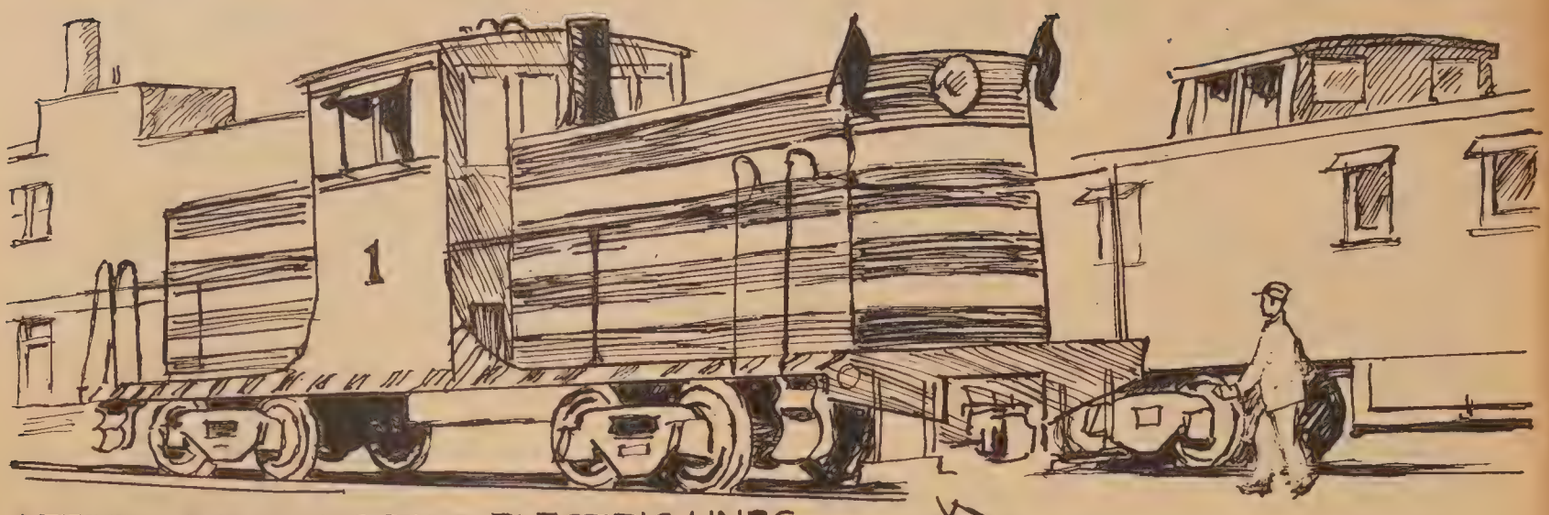
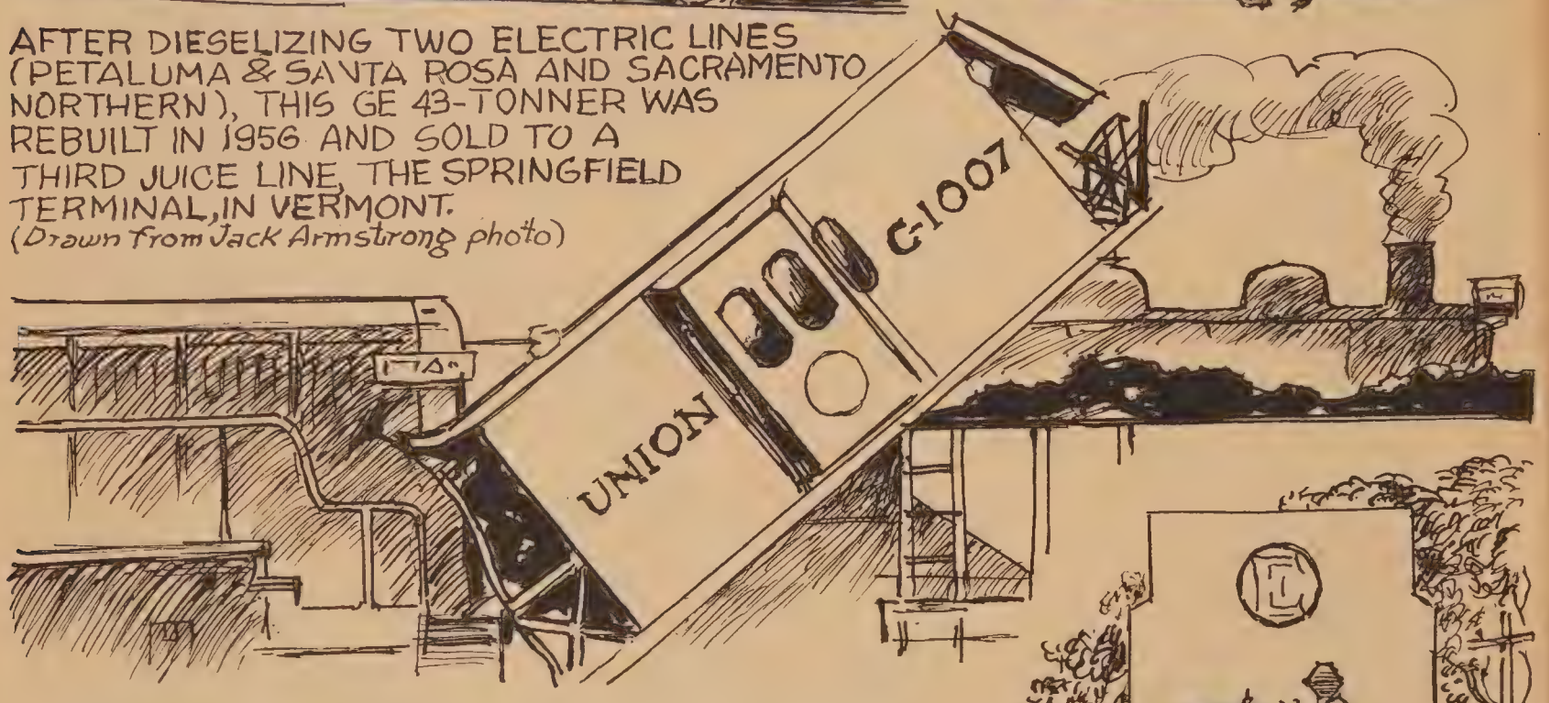
ALONG THE IRON PIKE

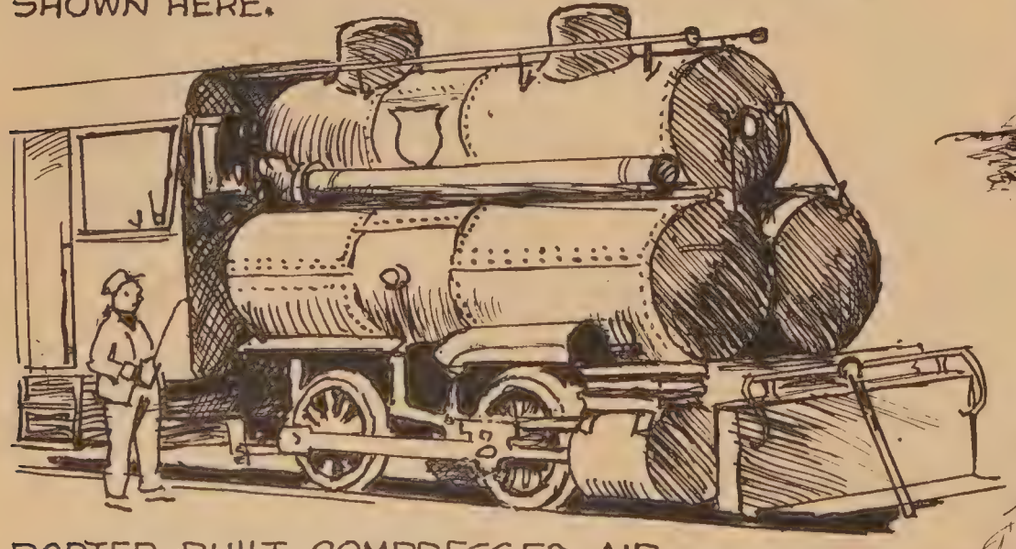
by Joe Easley



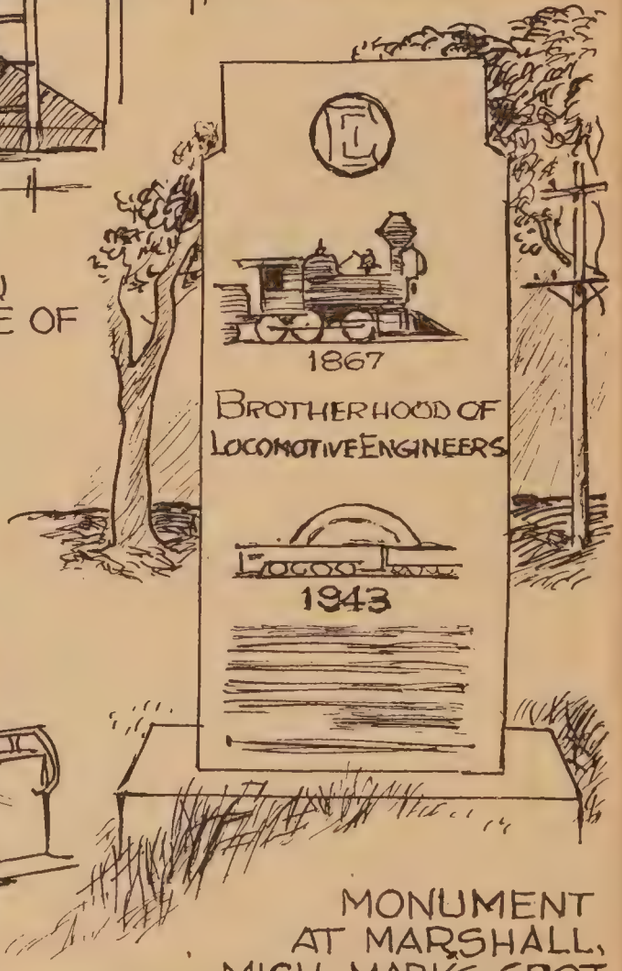
AFTER DIESELIZING TWO ELECTRIC LINES (PETALUMA & SANTA ROSA AND SACRAMENTO NORTHERN), THIS GE 43-TONNER WAS REBUILT IN 1956 AND SOLD TO A THIRD JUICE LINE, THE SPRINGFIELD TERMINAL, IN VERMONT.
(Drawn from Jack Armstrong photo)



BRASS COLLARS TRIED TO RUN A FREIGHT TRAIN RECENTLY AT PITTSBURGH, PA., DESPITE A STRIKE OF UNION RAILROAD EMPLOYES, WITH THE RESULT SHOWN HERE.

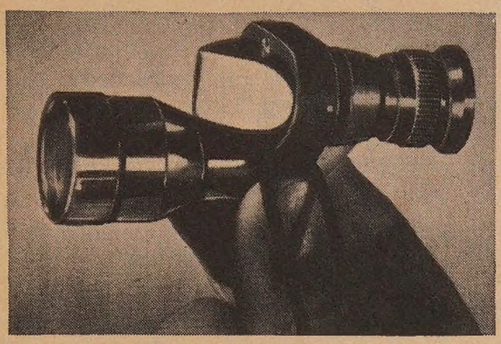


PORTER-BUILT COMPRESSED-AIR LOCOMOTIVE, NOW RETIRED. WE'D LIKE TO HEAR FROM READERS WHO HAVE SEEN ANY OF THESE OLD GIRLS IN ACTION.
(Courtesy of Wilbur T. Golson and Otto A. Weiss)

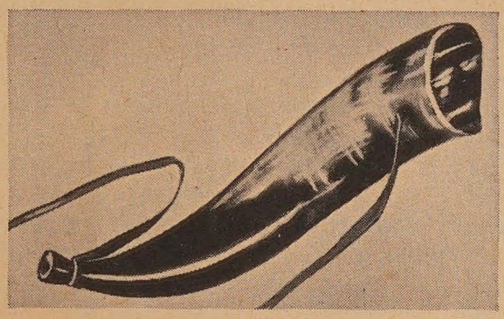


MONUMENT AT MARSHALL, MICH., MARKS SPOT WHERE BROTHERHOOD OF LOCOMOTIVE ENGINEERS WAS FOUNDED MAY 23, 1943.

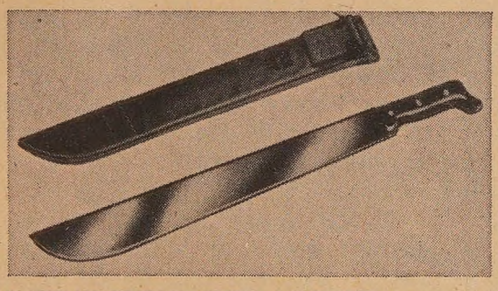
Save Money With These Fine Gift Values!



10-POWER MONOCULAR is the latest in a line of fine precision-made imported optics. Small enough (2¾" long) to fit into pants watch pocket, it's no toy, but a 10-power glass, whose size and light weight make it ideal to pack on any trip. Fine for outdoorsmen, snoopers, etc. Coated lens. $17.95 ppd.



OLD-TIME HUNTING HORN Romantically reminiscent of days gone by, these rare horns make a wonderful decoration. They're crafted from select steer horns and hand-polished to a beautiful sheen. Rawhide shoulder thong; clear, mellow tone. 14" horn (measured along the curve): $3.98 ppd. 16" horn: $4.98.



SURPLUS FRENCH STEEL MACHETE has a solid hunk of steel for its 14" blade, weighs 2½ lbs., comes in heavy saddle-leather belt sheath, will fell a good sized tree, bush out a trail, clear a campsite. Made in France for army use in Senegal, Africa. Brand new. A buy for $3.95.

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This favorite of mathmeticians also has all the precision features of the Pilot's Chronograph in addition to being a slide ruler. You'll be able to instantly multiply and divide with just a twist of the outer dial and amaze your friends by seeming to do the problems in your head.

Circular slide rule works exactly the same way as standard slide rule does, matching moveable calibrated outer ring against fixed inner ring.

HOBBY CLUB

conducted by Sy Reich

WE MOURN the razing of famous old Southern Railway terminal in Birmingham, Ala., which was opened in 1909 as a temple of travel from the golden era of railroading. Train after train made its last run from that station, but the rising cost of upkeep made its maintenance prohibitive. A new shelter is being built to replace it. Mike Eagleson viewed the remains in early November and reported that portions of the main room and offices were still intact, but he noted that one whole wing had already met with the wreckers steel ball.

To preserve the memory of this fine example of railroad architecture, the Heart of Dixie Chapter of NRHS has prepared a well-thought-out 20-page illustrated booklet, available from the Heart of Dixie Railroad Club, P.O. Box 896, Birmingham, Ala. 35201. All proceeds go to the maintenance of the club's twenty pieces of equipment, including four steam locos; $1.25 ppd.

"In the past 30 years I have assembled a very big collection of material on trains. boats, and airplanes," says John Motrie, 173 Horton Lane, Port Ewen, N.Y. 12446, "including colored pix, books, magazines, etc. I want to run a museum-type restaurant. Have available land and good promotion ideas, but need capital to get started. Will some reader suggest a way to raise the necessary cash?"

Timetable collectors will welcome a group specializing in their field. The National Association of Timetable Collectors is looking for more members. You would meet others with similar interests and get a monthly newsletter, plus a timetable list exchange with the names, addresses, and wants of all participating members; $4 per year. Write William L. Wagner, membership director, P.O. Box 842, Richmond. Ind. 47374.

Latest addition to the Smithsonian Institution is the car known as *Bedford 99*, donated by Peter Bell, grandson of James Bell, founder of General Mills Corp. The car was named after the Bells' summer estate in Minnesota. Built by Pullman in 1926 for George F. Baker, a New York financier, for $100,000, it is today valued at $50,000 to $70,000.

Later in its career the car was used by P. M. Shoemaker, president of the DL&W. It still has Lackawanna silverware. The silverware, chinaware, and goblets used by the Bells also will go with the car. Bell bought the car in 1968 in a bankrupt sale and used it on trips from his home in Minneapolis to New York and Chicago. On one trip to New York, he paid $500 in mileage fees (about 50 times that of a bus fare), and about $40 per day for parking. Smithsonian officials say they will use the car occasionally for board members, keeping it at a nearby railway station, but eventually will place it in a transportation museum to be built at some future date.

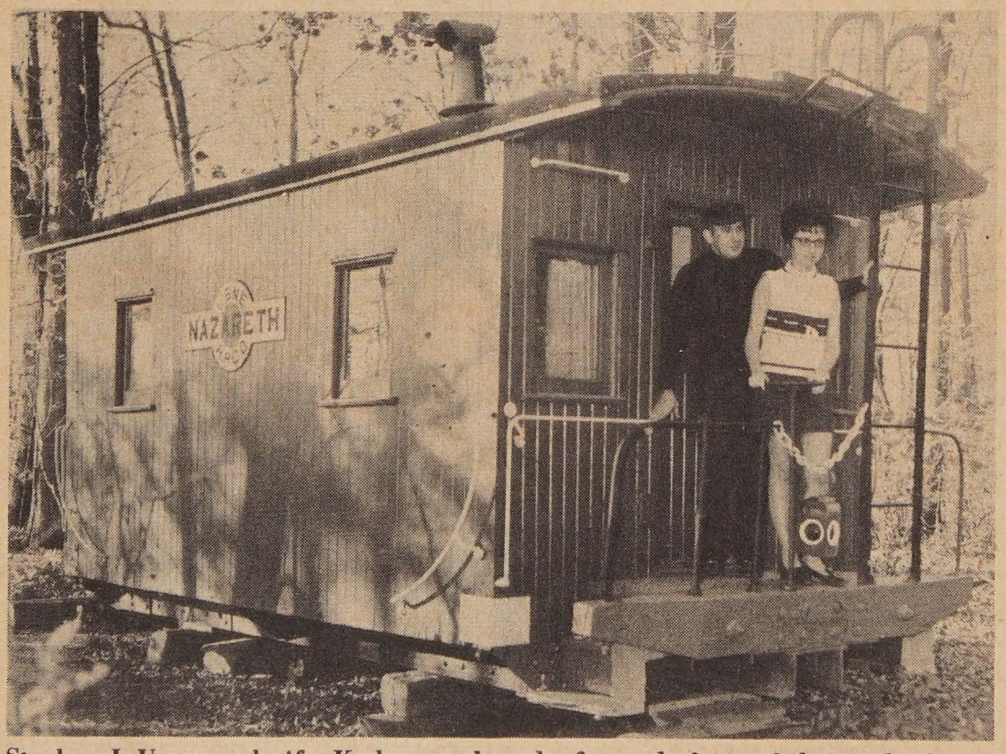
Midwest Central Railroad at Mount Pleasant, Iowa, is building a new trolley line to supplement steam activities. They hope to have the first segment of the proposed line operating next fall. Two streetcars are now owned and a third one was bought from the Magee Transportation Museum, Bloomsburg, Pa. This is car No. 1178, an open-bench type shipped from Rio de Janeiro.

New York, Ontario & Western is the special interest of Robert F. Harding, 40 Beach St., Marblehead, Mass. 01945. "I have over 2,500 photos of that road in 30 albums, plus several albums for clippings, menus, and tickets, all going back to the 1890's." Harding's father was an O&W engineer, beginning in 1869. He retired Christmas Day in 1910, but received no pension. A brother also was an engineer. Another brother also worked for the road.

Southern New Jersey's railroads is the topic under research by Richard F. Makse, 65-63 Maurice Ave., Woodside, N.Y. 11377. He needs photos and info. on roads in that area during the late 19th Century and early 20th. He plans to cover in depth the social and economic history of the state as it related to the railroads. He wants to hear from anyone with such data.

Tie-dated-nail collecting is a fast growing hobby. In fact, so many fans are out with pliers along the rights-of-way that at least one railroad, the Santa Fe, has decided to place no more nails in new ties because they hardly put them in before the fans remove them. Clarence Fowler of Paris, Ark., has all different types from 1903 to 1969. He wants to know when and where railroads first started using tie-dating nails and if any company still makes them.

Mesa County Library system of Grand Junction, Colo., is making an all-out drive for contributions of railroad publications for preservation. During the past year, its railroad holdings have increased 60 percent. A particularly proud addition are the microfilms of *Railroad Magazines* from 1955 to 1967, which save much-needed space as well as being a durable and permanent way of saving these old issues. Contact George S. Mitchell, 726 Chipeta Ave., Grand Junction, Colo. 81501, if you have rail literature to contribute. ●



Stephen J. Unger and wife, Kathy, stand on the front platform of their red caboose near their home in Bushkill, Pa. The crummy, built in 1914, and once owned by the Lehigh & New England, was bought from a Sciota, Pa., man for $200. Unger is an L&NE employe and has two brothers who have worked for the railroad. Nazareth sign is a nameplate from a former L&IE station. It must be nice to own a caboose.

Here they are...the King and Queen!

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